



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

## MEETING MATERIALS

November 6, 2008

CALTRANS

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION





## *Letter of Transmittal*

**TO:** Toll Bridge Program Oversight Committee  
(TBPOC)

**DATE:** October 29, 2008

**FR:** Program Management Team (PMT)

**RE:** TBPOC Meeting Materials Packet – November 6, 2008

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Herewith is the TBPOC Meeting Materials Packet for the November 6 meeting. The packet includes memoranda and reports that will be presented at the meeting. A Table of Contents is provided following the Agenda to help locate specific topics.

**TBPOC MEETING  
November 6, 2008, 10:00 am – 1:00 pm  
Lawrence Hall of Science, Conference Room 119  
Centennial Drive, Berkeley, CA**

<b>Topic</b>	<b>Presenter</b>	<b>Time</b>	<b>Desired Outcome</b>
<b>1. CHAIR'S REPORT</b>	W. Kempton, CT	5 min	Information
<b>2. LAWRENCE HALL OF SCIENCE</b> a. Educational Program Partnership* b. Tour of LHS Facility (end of meeting, time permitting)	B. Ney, CT B. Ney, CT	10 min 15 min	Approval Information
<b>3. CONSENT CALENDAR</b> a. October 1, 2008 Meeting Minutes* b. Benicia-Martinez Bridge Contract Closeout*	A. Fremier, BATA P. Lee, BATA	1 min 5 min	Approval Approval
<b>4. PROGRESS REPORTS</b> a. Draft Third Quarter Report, September 30, 2008***  b. Draft October 2008 Monthly Progress Report*** c. FHWA - Supplement to 2007 Annual Update*	A. Fremier/ P. Lee, BATA A. Fremier, BATA T. Anziano, CT	10 min  1 min 5 min	Information  Information Approval
<b>5. DUMBARTON/ ANTIOCH BRIDGES</b> a. Retrofit Strategy and Cost Estimates*	A. Fremier, BATA	20 min	Information
<b>6. PROGRAM ISSUES</b> a. TBSRP Capital Outlay Support (COS) Update*	A. Banani, CT P. Lee, BATA	15 min	Information
<b>7. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</b> a. Self-Anchored Suspension (SAS) Superstructure 1) SAS Acceleration Strategy Update* 2) Green-Tagging Procedure/Contract Change Order (CCO)* 3) Mechanical Electrical Piping (MEP) Update* 4) TY Lin Insurance Update*  b. Yerba Buena Island Detour (YBID) 1) Update 2) Contract Change Orders (CCOs)*  c. Yerba Buena Island Transition Structures (YBITS) No. 1 1) Update (matrix)*  d. Oakland Touchdown (OTD) No. 1 1) Update	T. Anziano, CT T. Anziano, CT  T. Anziano, CT T. Anziano, CT/ TY Lin/Moffat & Nichol JV  T. Anziano, CT T. Anziano, CT  T. Anziano, CT  T. Anziano, CT	10 min 15 min  15 min 30 min  5 min 5 min  5 min  5 min	Information Approval  Approval Approval  Information Approval  Information  Information
<b>8. OTHER BUSINESS</b>	W. Kempton, CT		n/a

**Next TBPOC Meeting: December 16, 2008, 10:00 am - 1:00 pm  
Autodesk Gallery, One Market, San Francisco, CA**

\*Attachments

\*\*Final documents still in process; to be provided as soon as available

\*\*\*Stand-alone document included in the binder

## **TBPOC MEETING November 6, 2008**

<b>INDEX TAB</b>	<b>AGENDA ITEM</b>	<b>DESCRIPTION</b>
<b>1</b>	<b>1</b>	<b>CHAIR'S REPORT</b>
<b>2</b>	<b>2</b>	<b>TOUR OF LAWRENCE HALL FACILITY</b> a. Educational Program Partnership* b. Tour of Facility (end of meeting, time permitting)
<b>3</b>	<b>3</b>	<b>CONSENT CALENDAR</b> a. October 1, 2008 Meeting Minutes* b. Benicia-Martinez Bridge Contract Closeout*
<b>4</b>	<b>4</b>	<b>PROGRESS REPORTS</b> a. Draft 3 <sup>rd</sup> Quarter Report, September 30, 2008*** b. Draft October 2008 Monthly Progress Report*** c. FHWA – Supplement to 2007 Annual Update*
<b>5</b>	<b>5</b>	<b>DUMBARTON/ANTIOCH BRIDGES</b> a. Retrofit Strategy and Cost Estimates*
<b>6</b>	<b>6</b>	<b>PROGRAM ISSUES</b> a. TBSRP Capital Outlay Support (COS) Update*
<b>7</b>	<b>7</b>	<b>SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</b> a. Self-Anchored Suspension (SAS) Superstructure 1) SAS Acceleration Strategy Update* 2) Green-Tagging Procedure/Contract Change Order (CCO)* 3) Mechanical Electrical Plumbing (MEP) Update 4) TY Lin Insurance Update* b. Yerba Buena Island Detour (YBID) 1) Update 2) Contract Change Orders (CCOs)* c. Yerba Buena Island Transition Structures (YBITS) No. 1 1) Update (matrix)* d. Oakland Touchdown (OTD) No. 1 1) Update
<b>8</b>	<b>8</b>	<b>OTHER BUSINESS</b>

\*Attachments

\*\*Final documents still in process; to be provided as soon as available

\*\*\*Stand-alone document included in the binder



## **ITEM 1: CHAIR'S REPORT**

No Attachments

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Bart Ney, Public Information Officer, Caltrans

**RE:** Agenda No. - 2a  
Item- Lawrence Hall of Science  
Educational Program Partnership

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**Recommendation:**  
**APPROVAL**

**Cost:**  
\$200,000

**Schedule Impacts:**  
N/A

**Discussion:**

As a key element of the 2008-2009 SFOBB Educational Outreach Pilot Program, the Educational Outreach Subcommittee has developed a proposal for a multi-faceted public education partnership with the Lawrence Hall of Science. The proposed program includes developing Bay Bridge-specific educational material for inclusion in classroom workshops, internships, a museum exhibit, online interactive activities, and more.

The Educational Outreach Subcommittee, the CPT and the PMT have approved the proposed budget. We request TBPOC approval to procure funds and proceed with this item in the Pilot Program.

**Attachment(s):**

SFOBB Lawrence Hall of Science Program Proposal

Discussion Draft

## **Seismic Retrofit of the San Francisco-Oakland Bay Bridge Lawrence Hall of Science Outreach Education Pilot Options**

September 17, 2008

Lawrence Hall of Science (LHS), the University of California's public science center, proposes a multi-faceted public education and outreach initiative designed to communicate essential aspects of the history-making seismic retrofit of the San Francisco-Oakland Bay Bridge. LHS is uniquely qualified to design and deliver this breadth of programming. More than a museum, LHS is a singular resource in science education; our mission is "to inspire and foster learning of science and mathematics for all." Throughout its 40-year history, LHS has been renowned for the depth and breadth of its programs: LHS develops and disseminates mathematics and science instructional materials that reach more than 20% of the nation's elementary students. Each year, more than 20,000 teachers participate in workshops, courses and institutes designed to improve the quality and quantity of their science and mathematics teaching. LHS delivers high quality instructional programs to more than 150,000 students annually at the Hall and at school and community sites—for many young students, these LHS programs are their only hands-on introduction to science.

Located on a hillside above the UC Berkeley campus, LHS overlooks the entire San Francisco Bay, and has a direct line of sight to the San Francisco-Oakland Bay Bridge project site. In addition to a changing array of exhibitions, and an ongoing educational program that includes classes, camps, planetarium shows and special events, the Hall uses its spectacular location to maximum advantage, engaging 250,000 on site visitors annually with activities and exhibits on the geologic and hydrologic forces that have shaped the San Francisco Bay. The Bay view also serves as a continual draw for virtual visits to LHS; each year the LHS website attracts more than 500,000 unique visitors—many of whom first visit the website to access our live 24/7 web cam on the view. The outstanding faculty and graduate students of the University of California inform the development of LHS projects. The exceptional combination of audience reach, program resources, and educational expertise provides a sound infrastructure on which to build model educational outreach programs for the San Francisco-Oakland Bay Bridge Seismic Retrofit.

Educational programs currently offered by LHS include relevant content on bridges and their engineering. LHS proposes a pilot project to "retrofit" these programs to include the science and engineering behind the Bay Bridge Seismic Safety Projects, incorporating some of the existing Bridge media and the expertise of Bridge engineers and content specialists.

We propose the following pilot programs. In combination, these programs will enable us to reach a cross section of the Bay Area community, with an emphasis on families and students in grades K-12, with information about the extraordinary retrofitting of the Bay Bridge. As is the case with other LHS programs, several of these pilots extend beyond the museum walls and will be delivered in classrooms and communities near the Bridge.

These programs will instill a greater appreciation for the complexity of the Bay Bridge Seismic Safety Projects and for the real world application of science and engineering in a project that is literally in our own backyard.

In short, we hope that these programs will inspire some of today's students to become the engineers, planners, and bridge builders of the future. It is an honor to have this opportunity to expand our service to the community through a partnership with the San Francisco-Oakland Bay Bridge Seismic Safety projects.

## **1. Prototyping a School & Community Outreach Festival**

Each year LHS delivers hundreds of “Festival” programs. LHS Festivals consist of 12-14 table top exhibit and hands-on activity stations that up to 150 people can experience at their own pace within a 50 minute time period. We propose adding an additional 2-3 stations to our *Build It* festival, which is one of the most popular offerings. These stations will feature building models of a variety of bridge types, which participants can then test on small shake tables. A larger-scale model of the self-anchored suspension bridge and photographs of the construction in progress will also be featured. With your support, the *Build It* festival will be made available to a designated number of schools and community groups free of charge. Following the pilot phase, the new stations will be fully incorporated into the *Build It* festival, which is booked by dozens of schools and community sites each year. LHS festivals are designed to be accessible for ages 5 through 11, and enjoyable for all ages through adult. LHS markets these programs throughout California, in a printed catalog and on the web, in which we will acknowledge that the program was sponsored in part by the Toll Bridge Program Oversight Committee.

Costs for developing and integrating Bay Bridge-specific elements for this pilot: \$5000

Costs for delivery of this pilot to 3-6 venues within 20-mile radius: \$3300—\$6600

Number of participants, depending on the number of venues supported: 1350—2700

Total Pilot Festival costs: \$8300 — \$11,600

## **2. Prototyping a School Outreach Workshop: Connecting Bay Area students with the Bay Bridge Seismic Retrofit Project**

LHS workshops afford more in-depth inquiry into a topic and actively engage individual students in exploration. Building on our *Blocks, Beams, and Bridges* workshop, LHS will add new content to the activities, integrating the SAS design and understanding of Bay Bridge specific seismic issues. Fifty-minute workshops will be made available to Bay Area schools and community groups at their site for K-2 and 3rd-8th grades. The workshop programming for the K-2 students will focus on hands-on experiences discovering what parts a bridge needs, and experimenting with different ways that bridges can be constructed. By building with a variety of materials, children will be exposed to problem solving related to stability, weight, and balance. The lesson will



culminate in the students assembling a model of the SAS section of the East span of the Bay Bridge to demonstrate how the piers, tower, cables, and roadway all function together. The workshop for 3rd through 8th grade will include activities to highlight teamwork and problem solving, and will engage students in designing a bridge that would be able to withstand a seismic event. Students will then be able to compare their designs with those of the Skyway and the Self Anchored Suspension bridges. Both workshops will incorporate existing visuals, photos, and computer renderings from the Seismic Retrofit Project.

Costs for developing and integrating Bay Bridge-specific elements for this pilot: \$5000

Costs for delivery of this pilot to 3-6 venues within 20-mile radius: \$2550—\$5100

Number of participants, depending on number of venues supported: 270—540

Total Pilot School Workshop costs: \$7550 —\$10,100

### **3. Seismic Retrofit Research Internships for High School Students**

LHS offers middle and high school students, especially those from groups that are under represented in scientific and engineering fields, the opportunity to gain meaningful, hands-on experience with field work, data collection, problem-solving, and reporting out. Through these internships, the students learn firsthand about the methods, tools and work of careers in science, engineering and technology. Students will be recruited from three East Bay Area high schools to participate in community-based research projects related to seismic retrofit design. Participating students first will review key concepts related to retrofitting, including an examination of notable examples, such as designs associated with the Skyway and Self-anchored sections of the new Bay Bridge (perhaps also including a bridge tour). Interns will then be engaged in field work, using handheld GPS receivers, digital cameras, and Palm smart phones to collect and catalogue data related to the prevalence or lack of seismic safety designs associated with houses, school buildings and other buildings located in their communities. This data will be used to map the occurrence or lack of seismic safety features in the communities examined, and will serve as the foundation for a potential larger scale, East Bay Area wide effort in the future. In addition, students will create and use surveys to gather information regarding the public's general understanding of the importance of retrofitting as it relates to housing and other critical structures in the Bay Area. Following their analysis of collected data, students will create designs and devise strategies in cases where improved retrofitting is needed, which will be included in the results of their work that will be presented at public events.

Costs for developing and integrating Bay Bridge-specific elements for this pilot: \$15,000

Costs to implement with 8-12 interns, pilot year: \$8000 — \$12,000

Total Pilot Internship costs, depending on the number of interns supported:

\$23,000 — \$27,000

#### **4. Technology Interactive: Museum floor exhibit component**

LHS's outdoor science park, *Forces That Shape the Bay*, affords a dramatic overlook for public understanding of the San Francisco-Oakland Bay Bridge Seismic Retrofit, the largest public construction project in the state's history. Using existing time-lapse or fly-through modeling media from the project, LHS staff will create a large screen prototype exhibit that highlights a specific engineering feat (e.g. Labor Day 2007) or overall construction challenge using kid-friendly, intuitive controls. The prototype exhibit will be accompanied by a short audio-visual explanation, and large-scale graphics that link the content to the panoramic view of the bridge from the *Forces That Shape the Bay*. An online version of the media used for the exhibit will be posted in a new, expandable section entitled "Bay Bridge Seismic Retrofit Project" at the popular LHS webcam site <http://sv.berkeley.edu/view/> that receives about 500,000 unique visitors per year. Once the prototype is completed, we will have a platform for potential future collaborations with the Seismic Safety Projects that could include: 1) collaborating with Bay Bridge staff to capture time lapse video of special construction events with four cameras for a 3-D immersive experience, and 2) investigating kinetic controls that will allow visitors to use their bodies to navigate through Bay Bridge media.

Costs for developing and integrating Bay Bridge-specific elements for this pilot:

\$50,000 — \$113,000

Number of participants: Annual audience of 250,000 visitors to LHS/year for physical exhibit; 500,000 visitors/year for web exhibit, plus additional visitors to SF-Oakland Bay Bridge Seismic Retrofit project website

Total Pilot Technology/Exhibit costs: \$50,000 — \$113,000

#### **5. Technology Interactive: Online content contribution for engineering challenge**

The LHS website has a special area for kids' activities with great potential for engagement and repeat play. Building on the successful online activity model of data recording and visualization for kids we used on the new LHS kids site (temporarily at <http://sv3.berkeley.edu/kidsite/>), we will work with Bay Bridge staff to create an online engineering challenge showcasing scientific concepts from the project. Visitors will collect photos, video, and other data to complete activities and then share their results with the online community. Some potential challenges may be to: 1) upload photos of the different types of bridge supports seen in other bridges around the world, or 2) build a bridge from household materials, test its strength, and report on it. Online challenges will be accompanied by a "Learn More" page with content connections to Bridge-specific and LHS sites, such as LHS classes and exhibits, content-specific photos on Flickr.com, and print-out activities based on popular LHS instructional materials. An electronic feed of data contributed to the site will be posted on the web.

Costs for developing and integrating Bay Bridge-specific elements for this pilot:

\$10,000—\$15,000

Number of participants: 50,000 visitors/year for web interactive challenge

Total Pilot Online Engineering Challenge costs: \$10,000 — \$15,000

## **6. Technology Interactive: Bay Bridge Engineer Comic Book**

All LHS components can be enhanced with the addition of online and/or print comics featuring the lives and work of select Bay Bridge engineers. By relating to the childhood stories of these experts, kids will gain a comfortable and salient access point to the complex scientific concepts of the project. Using the process we prototyped and perfected during the production of the *nanozone* nanotechnology exhibit at LHS, we will collect content from short interviews with Bay Bridge staff using a list of questions derived from an earlier focus group composed of 8-14 year olds. From the recorded interviews we will create a kid-appropriate script, detailed storyboards, and a finished 8-10 page virtual comic. All comics will be placed on the LHS kids site in a special "Bay Bridge Builders" section. Permanent links to download the comics can be added to any print or online materials. Future directions based on this prototype include: 1) a soft-cover printed book containing all comics and additional educational material, 2) animated movies based on the comics, or 3) question and answer kiosks based on engineer interviews.

Costs for developing and integrating Bay Bridge-specific elements for this pilot:

\$5,000 per engineer or character

Number of participants: 50,000 visitors/year for web exhibit

Total Pilot Bay Bridge Engineer Role Model/Comic costs: \$5,000

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We look forward to discussing these proposals further. Questions, comments and questions can be sent to:

Susan Gregory, Deputy Director

510-642-1793

[sgregory@berkeley.edu](mailto:sgregory@berkeley.edu)

Barbara Ando, Associate Director for Public Programs

510-642-2858

[bjando@berkeley.edu](mailto:bjando@berkeley.edu)

### **ITEM 3: CONSENT CALENDAR**

#### **a. October 1, 2008 Meeting Minutes**



## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Andrew Fremier, Deputy Executive Director, BATA

**RE:** Agenda No. - 3a  
Consent Calendar  
Item- October 1, 2008 Meeting Minutes

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**Recommendation:**  
**APPROVAL**

**Cost:**  
N/A

**Schedule Impacts:**  
N/A

**Discussion:**  
The Program Management Team has reviewed and requests TBPOC approval of the October 1, 2008 Meeting Minutes.

**Attachment(s):**  
October 1, 2008 Meeting Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

## MEETING MINUTES

October 1, 2008, 2:00 PM – 3:30 PM

ZPMC Meeting Facility

Changxing Island, Shanghai, China

**Attendees:** TBPOC Members: Will Kempton, Steve Heminger, and John Barna

PMT Members: Tony Anziano, Andy Fremier, and Stephen Maller

Participants: Ken Terpstra, Jon Tapping, Jason Tom, Dina Noel, and Peter Lee

Guests: Bill Dodd

Convened: Approximately 2:00 PM

Items	Action
<p><b>1. CHAIR'S REPORT</b></p> <ul style="list-style-type: none"><li>• The Chair noted how enlightening the fabrication site visit and meeting with ZPMC were and how teamwork will continue to be needed to deliver the project.</li><li>• The Chair gave an update on the State budget noting that:<ul style="list-style-type: none"><li>○ The budget was signed last week.</li><li>○ Proposition 42 funds were not suspended but sustained.</li><li>○ The executive order laying off retired annuitants and interns was still in effect, however, exemptions could be sought if there were project impacts.</li></ul></li><li>• The Chair welcomed Bill Dodd, Chairman of the Bay Area Toll Authority.</li></ul>	
<p><b>2. CONSENT CALENDAR</b></p> <p>a. BATA presented the September 4, 2008 TBPOC Meeting Minutes for approval.</p>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> the September 4, 2008 TBPOC Meeting Minutes as presented.</li></ul>

(continued)

Items	Action
<p><b>3. PROGRESS REPORTS</b></p> <ul style="list-style-type: none"><li>a. BATA presented a draft of the September 2008 Monthly Progress Report for approval, in lieu of the PMT's delegated approval.</li><li>• Staff briefly reported that there would be upcoming information on the seismic retrofitting of the Dumbarton and Antioch Bridges at the next TBPOC meeting. A report on the bridges is scheduled for the next TBPOC meeting in November, to include an update on retrofit strategy, cost, and environmental issues.</li></ul>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> the September 2008 Monthly Progress Report for distribution.</li></ul>
<p><b>4. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</b></p> <ul style="list-style-type: none"><li>• The presentation order of the items was revised per TBPOC direction.</li><li>a. West Approach Book<ul style="list-style-type: none"><li>• The Department presented, for approval, the West Approach Book that memorialized the history and successful delivery of the West Approach Project. The Department further recognized Alec Melkonians and Caltrans Graphics for their hard work on the book.</li><li>• The Chair noted the excellent quality of the book.</li></ul></li><li>b. YBITS No. 1 Contract<ul style="list-style-type: none"><li>• The Department presented the YBITS No. 1 update matrix.</li><li>• It was discussed that the Corridor Scheduling Team (CST) has evaluated the current project schedule and has determined that, given what is currently planned and to properly line up the contract schedules, the YBITS No. 1 contract</li></ul></li></ul>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> the West Approach Book for production.</li></ul>

(continued)

Items	Action
<p>bid opening should be postponed. However, as more is known on the progress of the YBI Detour, a better schedule can be developed with a clearer understanding of schedule impacts.</p> <ul style="list-style-type: none"><li>• Further, it was discussed that to minimize the impacts to potential bidders of YBITS No. 1, an addendum to delay bid opening should be issued as soon as possible.</li><li>• A motion was made and approved to change this item to an action item and to delay bid opening of the YBITS No. 1 contract by an addendum, with approval of the final addendum and revised bid opening date to be delegated to the PMT.</li></ul> <p>c. Team China</p> <ul style="list-style-type: none"><li>• Staff presented an item updating the TBPOC on Team China staffing. The update focused on identifying the challenges of maintaining Department representation at ZPMC to ensure quality and project delivery.</li><li>• The remaining challenges focus on staff with families, as currently there are no allowances for family expenses – though these types of allowances are provided to Federal overseas staffing and private expatriate staffing.</li><li>• BATA has determined that reimbursements can be made to the Department for expenses the State deems eligible. However, there are currently no State family guidelines for extended overseas stays.</li><li>• It was discussed to explore funding options through the California Transportation Foundation or a non-profit route.</li></ul>	<ul style="list-style-type: none"><li>• The TBPOC <b>APPROVED</b> a motion to change this item to an action item, and <b>APPROVED</b> the delay of the YBITS No. 1 construction contract bid opening and delegated to the PMT the selection of the revised bid opening date and approval of the addendum document.</li></ul>



(continued)

Items	Action
<ul style="list-style-type: none"><li>Given the importance and unique characteristics of the project, the Chair will explore options with the Department of Personnel Administration.</li></ul> <p>d. Self-Anchored Suspension Superstructure (SAS) Update</p> <ul style="list-style-type: none"><li>The TBPOC and staff had an extended inspection of the fabrication facilities at ZPMC. Areas reviewed included the shearleg crane barge, the Team China offices, the Tower fabrication shop, the temporary support trusses, the orthotropic box girder (OBG) assembly bays, and the deck panel sub-assembly fabrication shop.</li><li>Discussion focused on the status of OBG fabrication. It was discussed that an acceptance criteria and weld repair procedure have been established by the Department and ABF to deal with linear indications at tack weld locations. The acceptance criteria will be documented in a to-be approved contract change order.</li><li>Another potential contract change order will address the green-tagging process planned by ABF to incorporate all fabrication and welding documentation and reporting into a single electronic database. The process will provide incremental hold points for approval of sub-assemblies before incorporation into larger assemblies.</li><li>The process requires additional resources in both contractor inspection staffing, data entry, and database systems. ABF has asked the Department to participate in funding of this effort as they believe</li></ul>	<ul style="list-style-type: none"><li>The Chair will explore options with the Department of Personnel Administration to reimburse expenses from Fiscal Year '08/'09 forward.</li><li>Staff to provide Chair with a proposal to cover Team China unreimbursed expenses.</li></ul>

**(continued)**

Items	Action
<p>it will be beneficial to both parties.</p> <ul style="list-style-type: none"><li>• The process should provide improved access to documentation for quality assurance and acceptance.</li><li>• The process is not specified in the contract specifications. Current specification is geared towards fabrication of simpler pieces, i.e. steel I-beam girder, not larger OBG and tower assemblies.</li><li>• The initial ABF estimated cost of the green-tagging process is approximately \$21 million over the remaining 2 to 2 ½ years of fabrication.</li><li>• The Department has been in discussion with ABF on the contract change and is looking at trying out the system for the next year at a lower agreed price.</li><li>• The TBPOC continued evaluating the need for the change and discussed looking at additional ways to improve the fabrication schedule and the need to engage ABF in those discussions.</li><li>• As the process is still being evaluated and is for information only, no additional action was taken at the meeting.</li></ul>	
<p><b>5. OTHER BUSINESS</b></p> <ul style="list-style-type: none"><li>• N/A</li></ul>	

Adjourned: Approximately 3:30 PM

***(continued)***

**MEETING MINUTES**

October 1, 2008, 2:00 PM – 4:30 PM

ZPMC Meeting Facility

Changxing Island, Shanghai, China

**APPROVED BY:**

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**WILL KEMPTON**, Director  
California Department of Transportation

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Date

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**JOHN F. BARNA, Jr.**, Executive Director  
California Transportation Commission

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Date

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**STEVE HEMINGER**, Executive Director  
Bay Area Toll Authority

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Date

### **ITEM 3: CONSENT CALENDAR**

#### **b. Benicia-Martinez Bridge Contract Closeout**



**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Peter Lee, Senior Transportation Engineer, BATA

**RE:** Agenda No. - 3b

Item- Consent Calendar  
New Benicia-Martinez Bridge Contract Closeout

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**Recommendation:**

**APPROVAL**

**Cost Impacts:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

The PMT recommends that the TBPOC approve the New Toll Plaza Contract settlement in the amount of \$1.9 million. All proposed actions have been accounted for in the existing project budget.

On the New Toll Plaza Contract, work was completed and accepted by the Department in May 2007. The Department has been working to settle contract claims made by the Contractor. The claims involved a number of items, including but not limited to, problems with the toll plaza canopy, changes for the building fire suppression system and vehicle crash cushions, and cost escalation.

The Contractor has filed claims in the amount of \$3.4 million. Based on a detailed evaluation of the claims, the Department has determined the project claim exposure to be \$2.9 million. Through audits and meetings with the Contractor, the Department has successfully negotiated a final settlement in the amount of \$1.9 million. Risk management highlighted the potential cost of the claims; and more than sufficient funds have already been budgeted for the settlement.

The Department and BATA staffs have reviewed the proposed settlement and have found it to be acceptable. Staff recommends that the TBPOC approve the settlement proposal.

On the Existing Bridge Modification Contract, the Department is requesting budgeted supplemental funds from BATA in the amount of \$6.3 million. Deck rehabilitation work has started on the west side of the bridge with 12-foot sections of deck being removed for rehabilitation. The work is proceeding as planned, and is expected to be completed by the end of summer 2009.

The supplemental funds will be used to replenish and set aside additional contract contingencies to cover expended and future costs associated with deck repairs, relocation of an existing CMS as requested by BATA, fluctuations in the oil price index for paving, and other items. There are no changes over \$1 million that will require TBPOC approval and no budget change is required. This item is an information item, and no action is required by the TBPOC.

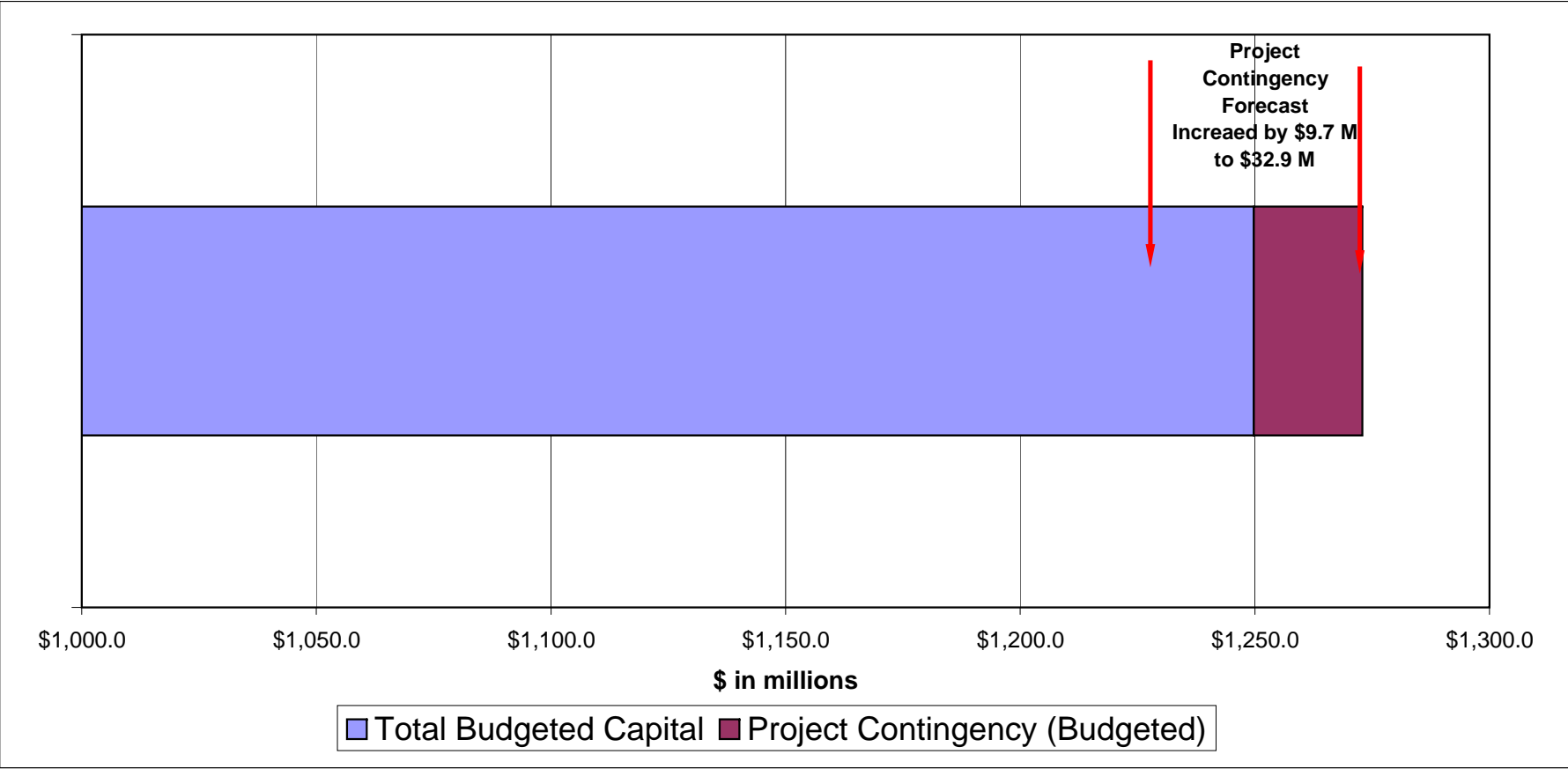
Overall, including the aforementioned proposed items, the forecast project contingency is still expected to increase by \$9.7 million to \$32.9 million as contracts are completed and closed out (see attached bar chart).

**Attachment(s):**

New Benicia-Martinez Bridge Project, October-08

# New Benicia-Martinez Bridge Project

October-08



Project Budget			Project Forecast			Change
Construction	1,036.2		Construction	1,021.5		-14.7
Right-of-Way	20.3		Right-of-Way	20.3		0.0
Support	193.3		Support	198.3		5.0
Total Budgeted Capital	1,249.8		Total Forecasted Capital	1,240.1		-9.7
Project Contingency (Budgeted)	23.2		Project Contingency (Forecasted)	32.9		9.7
Total Project Budget	1,273.0		Total Project Forecast	1,273.0		0.0

## **ITEM 4: PROGRESS REPORTS**

- a. Draft Third Quarter Report, September 30,  
2008

**TO:** Toll Bridge Program Oversight Committee      **DATE:** October 29, 2008  
(TBPOC)

**FR:** Andrew Fremier, Deputy Executive Director, BATA

**RE:** Agenda No. - 4a  
Progress Reports  
Item- Draft Third Quarter Report, September 30, 2008

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**Recommendation:**

For Information / **APPROVAL**

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

Attached, for information, is the 3rd Quarter 2008 Report Production Schedule, which reflects the status of completed report tasks and the schedule for remaining actions.

Also included in this package is the Draft Third Quarter Report, September 30, 2008. The TBPOC is requested to grant the PMT authority to approve this report on its behalf after appropriate reviews and final comments on the proposed final draft are received.

TBPOC approval of reported forecast is also requested (see attached Appendix A1, A2, and B of the Draft 3<sup>rd</sup> Quarter Report and the SAS Budget Balance Beam). The Risk Register is currently reporting significant additional risk, which may impact the forecast (the likelihood of this was noted on page 25 of the 3rd Quarter Report).

**Attachment(s):**

1. Projected 3rd Quarter 2008 Report Production Schedule
2. Appendix A1, A2 and B
3. SAS Budget Balance Beam
4. Draft Third Quarter Report, September 30, 2008 (see end of binder)



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

## 3rd Quarter 2008 Report Production Schedule

<b>3rd Quarter 2008 Report: Legislated Deadline - November 12, 2008</b>	
BAMC Begin Quarterly Report Development; Issue First Call for Input	Monday, September 15, 2008
BAMC Prepare Quarterly Report 1st Draft for PMT, BATA, Caltrans	<b>Monday, October 06, 2008</b>
PMT / BATA / Caltrans Review & Comment on 1st Draft	<b>Thursday, October 09, 2008</b>
BAMC Incorporate Comments: Produce 2nd Draft for TBPOC Review	Friday, October 10, 2008
TBPOC Review & Comment on 2nd Draft	Monday, October 13, 2008
Expenditure Update (Anticipated Date)	Monday, October 20, 2008
BAMC Incorporate Comments; Produce Proposed Final Draft for TBPOC and Agency	Tuesday, October 21, 2008
BAMC Issue Proposed Final Draft to TBPOC & Agency	Thursday, October 23, 2008
TBPOC and Agency Review / Comment on Proposed Final Draft	<b>Friday, October 31, 2008</b>
BAMC Incorporate Comments: Produce Advanced Final Draft + Table of Conflicting Comments	Wednesday, November 05, 2008
TBPOC Teleconference to make Final Comments and Resolve Conflicting Comments	Friday, November 07, 2008
BAMC Incorporate All Final Comments from TBPOC; Emails Final Version for Information	Tuesday, November 11, 2008
Produce & Issue Quarterly Report to Legislature & CTC	<b>Wednesday, November 12, 2008</b>

Toll Bridge Seismic Retrofit Program						
AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through September 30, 2008						
(Dollars in millions)						
Bridge		AB 144/SB 66 Baseline	TBPOC Approved Budget	2nd Quarter 2008 Forecast	3rd Quarter 2008 Forecast	Expenditures Through September 30, 2008
Benicia-Martinez						
	Capital Outlay Support	\$38.14	\$38.14	\$38.1	\$38.1	\$38.09
	Capital Outlay	\$139.69	\$139.69	\$139.7	\$139.7	\$139.72
	Total	\$177.83	\$177.83	\$177.8	\$177.8	\$177.81
Carquinez						
	Capital Outlay Support	\$28.67	\$28.67	\$28.7	\$28.7	\$28.79
	Capital Outlay	\$85.46	\$85.46	\$85.5	\$85.5	\$85.40
	Total	\$114.13	\$114.13	\$114.2	\$114.2	\$114.19
San Mateo-Hayward						
	Capital Outlay Support	\$28.14	\$28.14	\$28.1	\$28.1	\$28.11
	Capital Outlay	\$135.37	\$135.37	\$135.4	\$135.4	\$135.32
	Total	\$163.51	\$163.51	\$163.5	\$163.5	\$163.43
Vincent Thomas						
	Capital Outlay Support	\$16.42	\$16.42	\$16.4	\$16.4	\$16.37
	Capital Outlay	\$42.09	\$42.09	\$42.1	\$42.1	\$42.04
	Total	\$58.51	\$58.51	\$58.5	\$58.5	\$58.41
San Diego-Coronado						
	Capital Outlay Support	\$33.50	\$33.50	\$33.5	\$33.5	\$33.21
	Capital Outlay	\$70.02	\$70.02	\$70.0	\$70.0	\$69.39
	Total	\$103.52	\$103.52	\$103.5	\$103.5	\$102.60
Richmond-San Rafael						
	Capital Outlay Support	\$134.00	\$127.00	\$127.0	\$127.0	\$126.69
	Capital Outlay	\$698.00	\$689.50	\$689.5	\$689.5	\$668.11 *
	Richmond-San Rafael Project Reserves	\$82.00				
	Total	\$914.00	\$816.50	\$816.5	\$816.5	\$794.80
West Span Retrofit						
	Capital Outlay Support	\$75.00	\$75.00	\$75.0	\$75.0	\$74.81
	Capital Outlay	\$232.90	\$232.90	\$232.9	\$232.9	\$227.21
	Total	\$307.90	\$307.90	\$307.9	\$307.9	\$302.02
West Approach						
	Capital Outlay Support	\$120.00	\$120.00	\$120.0	\$120.0	\$109.98
	Capital Outlay	\$309.00	\$333.70	\$350.7	\$350.7	\$292.43
	Total	\$429.00	\$453.70	\$470.7	\$470.7	\$402.41
SFOBB East Span						
	Capital Outlay Support	\$959.30	\$959.30	\$977.1	\$977.1	\$646.61
	Capital Outlay	\$4,492.19	\$4,711.00	\$4,745.2	\$4,890.3	\$2,541.21
	Other Budgeted Capital	\$35.11	\$31.81	\$7.7	\$7.7	\$0.68
	Total	\$5,486.60	\$5,702.11	\$5,730.0	\$5,875.1	\$3,188.50
	Program Indirect	\$30.00	\$30.00	\$30.0	\$30.0	\$24.74
	Subtotal Capital Outlay Support	\$1,463.17	\$1,456.17	\$1,473.9	\$1,473.9	\$1,127.40
	Subtotal Capital Outlay	\$6,321.83	\$6,471.54	\$6,498.7	\$6,643.8	\$4,201.51
	Subtotal Toll Seismic Retrofit	\$7,785.00	\$7,927.71	\$7,972.6	\$8,117.7	\$5,328.91
	Program Contingency	\$900.00	\$757.29	\$712.4	\$567.3	
	Total Toll Seismic Retrofit Program	\$8,685.00	\$8,685.00	\$8,685.0	\$8,685.0	\$5,328.91

Notes:

\* Budget for Richmond-San Rafael Bridge includes \$16.9 million of deck joint rehabilitation work that considered to be eligible for seismic retrofit program funding.  
(Due to the rounding of numbers, the totals above are show within \$0.02).

Toll Bridge Seismic Retrofit Program						
AB 144 Baseline Budget, Forecasts and Expenditures Through September 30, 2008						
(Dollars in millions)						
	Column A	Column B	Column C	Column D	Column E	
Bridge	AB 144/ SB 66 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and	Estimated Costs not yet	Total Forecast	
			Encumbrances	Spent or Encumbered	As of September 30, 2008	
			As of September 30, 2008	As of September 30, 2008	As of September 30, 2008	
			See Note (1)		(Columns C +D)	
Other Completed Projects						
	Capital Outlay Support	\$144.87	\$144.87	\$144.59	\$0.31	\$144.9
	Capital Outlay	\$472.63	\$472.63	\$472.59	\$0.11	\$472.7
	Total	\$617.50	\$617.50	\$617.18	\$0.42	\$617.6
Richmond-San Rafael						
	Capital Outlay Support	\$134.00	\$127.00	\$126.68	\$0.32	\$127.0
	Capital Outlay	\$698.00	\$689.50	\$674.78	\$14.72	\$689.5
	Project Reserves	\$82.00				
	Total	\$914.00	\$816.50	\$801.46	\$15.04	\$816.5
West Span Retrofit						
	Capital Outlay Support	\$75.00	\$75.00	\$74.81	\$0.19	\$75.0
	Capital Outlay	\$232.90	\$232.90	\$232.80	\$0.10	\$232.9
	Total	\$307.90	\$307.90	\$307.61	\$0.29	\$307.9
West Approach						
	Capital Outlay Support	\$120.00	\$120.00	\$111.33	\$8.67	\$120.0
	Capital Outlay	\$309.00	\$333.70	\$324.76	\$25.94	\$350.7
	Total	\$429.00	\$453.70	\$436.09	\$34.61	\$470.7
SFOBB East Span -Skyway						
	Capital Outlay Support	\$197.00	\$181.00	\$181.45	-\$0.45	\$181.0
	Capital Outlay	\$1,293.00	\$1,254.10	\$1,400.09	-\$145.99	\$1,254.1
	Total	\$1,490.00	\$1,435.10	\$1,581.54	-\$146.44	\$1,435.1
SFOBB East Span -SAS- Superstructure						
	Capital Outlay Support	\$214.63	\$214.63	\$111.56	\$103.04	\$214.6
	Capital Outlay	\$1,753.72	\$1,753.72	\$1,649.64	\$262.86	\$1,912.5
	Total	\$1,968.35	\$1,968.35	\$1,761.20	\$365.90	\$2,127.1
SFOBB East Span -SAS- Foundations						
	Capital Outlay Support	\$62.50	\$41.00	\$37.58	\$3.42	\$41.0
	Capital Outlay	\$339.91	\$307.30	\$308.73	-\$1.43	\$307.3
	Total	\$402.41	\$348.30	\$346.31	\$1.99	\$348.3
Small YBI Projects						
	Capital Outlay Support	\$10.58	\$10.58	\$10.17	\$0.43	\$10.6
	Capital Outlay	\$15.66	\$15.66	\$16.24	-\$0.54	\$15.7
	Total	\$26.24	\$26.24	\$26.41	-\$0.11	\$26.3
South/South Detour						
	Capital Outlay Support	\$29.50	\$66.00	\$51.91	\$14.09	\$66.0
	Capital Outlay	\$131.92	\$442.20	\$367.21	\$93.99	\$461.2
	Total	\$161.42	\$508.20	\$419.12	\$108.08	\$527.2
YBI - Transition Structures						
	Capital Outlay Support	\$78.65	\$78.65	\$16.39	\$62.31	\$78.7
	Capital Outlay	\$299.36	\$276.10	\$0.09	\$276.01	\$276.1
	Total	\$378.01	\$354.75	\$16.48	\$338.32	\$354.8
Oakland Touchdown						
	Capital Outlay Support	\$74.40	\$74.40	\$45.40	\$46.70	\$92.1
	Capital Outlay	\$283.80	\$283.80	\$219.08	\$83.42	\$302.5
	Total	\$358.20	\$358.20	\$264.48	\$130.12	\$394.6
East Span Other Small Project						
	Capital Outlay Support	\$212.32	\$213.32	\$202.81	\$10.49	\$213.3
	Capital Outlay	\$170.78	\$170.78	\$93.01	\$53.59	\$146.6
	Total	\$383.10	\$384.10	\$295.82	\$64.08	\$359.9
Existing Bridge Demolition						
	Capital Outlay Support	\$79.72	\$79.72	\$0.35	\$79.35	\$79.7
	Capital Outlay	\$239.15	\$239.15	\$0.00	\$222.00	\$222.0
	Total	\$318.87	\$318.87	\$0.35	\$301.35	\$301.7
	Miscellaneous Program Costs	\$30.00	\$30.00	\$26.08	\$3.92	\$30.0
	Total Capital Outlay Support (2)	\$1,463.17	\$1,456.17	\$1,141.11	\$332.79	\$1,473.9
	Total Capital Outlay	\$6,321.83	\$6,471.54	\$5,759.02	\$884.78	\$6,643.8
	Program Total	\$7,785.00	\$7,927.71	\$6,900.13	\$1,217.57	\$8,117.7

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

(2). Total Capital Outlay Support includes program indirect costs.

(Due to the rounding of numbers, the totals above are shown within \$0.02).



Toll Bridge Seismic Retrofit Program - SFOBB East Span Only						
AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through September 30, 2008						
(Dollars in millions)						
East Span Contract		AB 144/SB 66 Baseline	TBPOC Current Approved Budget	2ndQuarter 2008 Forecast	3rd Quarter 2008 Forecast	Expenditures Through September 30, 2008
SFOBB East Span -Skyway						
	Capital Outlay Support	\$197.00	\$181.00	\$181.0	\$181.0	\$180.81
	Capital Outlay	\$1,293.00	\$1,254.10	\$1,254.1	\$1,254.1	\$1,236.48
	Total	\$1,490.00	\$1,435.10	\$1,435.1	\$1,435.1	\$1,417.29
SFOBB East Span -SAS- Superstructure						
	Capital Outlay Support	\$214.63	\$214.63	\$214.6	\$214.6	\$105.61
	Capital Outlay	\$1,753.72	\$1,753.72	\$1,767.4	\$1,912.5	\$528.92
	Total	\$1,968.35	\$1,968.35	\$1,982.0	\$2,127.1	\$634.53
SFOBB East Span -SAS- W2 Foundations						
	Capital Outlay Support	\$10.00	\$10.00	\$10.0	\$10.0	\$9.20
	Capital Outlay	\$26.40	\$26.40	\$26.4	\$26.4	\$25.82
	Total	\$36.40	\$36.40	\$36.4	\$36.4	\$35.02
SFOBB East Span -SAS- E2/T1 Foundations						
	Capital Outlay Support	\$52.50	\$31.00	\$31.0	\$31.0	\$28.26
	Capital Outlay	\$313.51	\$280.90	\$280.9	\$280.9	\$274.49
	Total	\$366.01	\$311.90	\$311.9	\$311.9	\$302.75
YBI/SAS (Archeology)						
	Capital Outlay Support	\$1.08	\$1.08	\$1.1	\$1.1	\$1.08
	Capital Outlay	\$1.06	\$1.06	\$1.1	\$1.1	\$1.06
	Total	\$2.14	\$2.14	\$2.2	\$2.2	\$2.14
YBI - USCG Rd Relocation						
	Capital Outlay Support	\$3.00	\$3.00	\$3.0	\$3.0	\$2.67
	Capital Outlay	\$3.00	\$3.00	\$3.0	\$3.0	\$2.81
	Total	\$6.00	\$6.00	\$6.0	\$6.0	\$5.48
YBI - Substation & Viaduct						
	Capital Outlay Support	\$6.50	\$6.50	\$6.5	\$6.5	\$6.43
	Capital Outlay	\$11.60	\$11.60	\$11.6	\$11.6	\$11.30
	Total	\$18.10	\$18.10	\$18.1	\$18.1	\$17.73
South/South Detour						
	Capital Outlay Support	\$29.50	\$66.00	\$66.0	\$66.0	\$49.83
	Capital Outlay	\$131.92	\$442.20	\$461.2	\$461.2	\$233.17
	Total	\$161.42	\$508.20	\$527.2	\$527.2	\$283.00
YBI - Transition Structures (Total, including the following split contracts and prior-to-split expenditures)						
	Capital Outlay Support	\$78.65	\$78.65	\$78.7	\$78.7	\$21.52
	Capital Outlay	\$299.36	\$276.10	\$276.1	\$276.1	\$0.00
	Total	\$378.01	\$354.75	\$354.8	\$354.8	\$21.52
YBI- Transition Structures Contract No. 1						
	Capital Outlay Support			\$45.0	\$45.0	\$3.41
	Capital Outlay			\$214.3	\$214.3	\$0.00
	Total			\$259.3	\$259.3	\$3.41
YBI- Transition Structures Contract No. 2						
	Capital Outlay Support			\$16.0	\$16.0	\$1.71
	Capital Outlay			\$58.5	\$58.5	\$0.00
	Total			\$74.5	\$74.5	\$1.71
YBI- Transition Structures Contract No. 3 - Landscape						
	Capital Outlay Support			\$1.0	\$1.0	\$0.00
	Capital Outlay			\$3.3	\$3.3	\$0.00
	Total			\$4.3	\$4.3	\$0.00
Oakland Touchdown (Total, including the following split contracts and prior-to-split expenditures)						
	Capital Outlay Support	\$74.40	\$74.40	\$92.1	\$92.1	\$43.25
	Capital Outlay	\$283.80	\$283.80	\$302.5	\$302.5	\$123.05
	Total	\$358.20	\$358.20	\$394.6	\$394.6	\$166.30
Oakland Touchdown Contract No. 1						
	Capital Outlay Support	\$0.00	\$49.90	\$49.9	\$49.9	\$20.70
	Capital Outlay	\$0.00	\$226.50	\$226.5	\$226.5	\$115.18
	Total	\$0.00	\$276.40	\$276.4	\$276.4	\$135.88
Oakland Touchdown Contract No. 2						
	Capital Outlay Support	\$0.00	\$0.00	\$15.8	\$15.8	\$1.19
	Capital Outlay	\$0.00	\$0.00	\$62.0	\$62.0	\$0.00

Toll Bridge Seismic Retrofit Program - SFOBB East Span Only					
AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through September 30, 2008					
(Dollars in millions)					
East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget	2ndQuarter 2008 Forecast	3rd Quarter 2008 Forecast	Expenditures Through September 30, 2008
Total	\$0.00	\$0.00	\$77.8	\$77.8	\$1.19
Oakland Touchdown Contract - Electrical Systems					
Capital Outlay Support	\$0.00	\$0.00	\$1.4	\$1.4	\$0.45
Capital Outlay	\$0.00	\$0.00	\$4.4	\$4.4	\$0.00
Total	\$0.00	\$0.00	\$5.8	\$5.8	\$0.45
Oakland Touchdown Contract - Navy Cable <sup>(1)</sup>					
Capital Outlay Support	\$0.00	\$0.00	\$3.0	\$3.0	\$0.87
Capital Outlay	\$0.00	\$0.00	\$9.6	\$9.6	\$7.87
Total	\$0.00	\$0.00	\$12.6	\$12.6	\$8.74
Oakland Geofill					
Capital Outlay Support	\$2.47	\$2.47	\$2.5	\$2.5	\$2.51
Capital Outlay	\$8.21	\$8.21	\$8.2	\$8.2	\$8.21
Total	\$10.68	\$10.68	\$10.7	\$10.7	\$10.72
Pile Installation Demonstration Project					
Capital Outlay Support	\$1.79	\$1.79	\$1.8	\$1.8	\$1.79
Capital Outlay	\$9.25	\$9.25	\$9.2	\$9.2	\$9.25
Total	\$11.04	\$11.04	\$11.0	\$11.0	\$11.04
Existing Bridge Demolition					
Capital Outlay Support	\$79.72	\$79.72	\$79.7	\$79.7	\$0.35
Capital Outlay	\$239.15	\$239.15	\$222.0	\$222.0	\$0.00
Total	\$318.87	\$318.87	\$301.7	\$301.7	\$0.35
Stormwater Treatment Measures					
Capital Outlay Support	\$6.00	\$8.00	\$8.0	\$8.0	\$7.99
Capital Outlay	\$15.00	\$18.30	\$18.3	\$18.3	\$16.56
Total	\$21.00	\$26.30	\$26.3	\$26.3	\$24.55
Right-of-way and Environmental Mitigation					
Capital Outlay Support	\$0.00	\$0.00	\$0.0	\$0.0	\$0.00
Capital Outlay	\$72.40	\$72.40	\$72.4	\$72.4	\$39.28
Total	\$72.40	\$72.40	\$72.4	\$72.4	\$39.28
Sunk Cost - Existing East Span Retrofit					
Capital Outlay Support	\$39.46	\$39.46	\$39.5	\$39.5	\$39.46
Capital Outlay	\$30.81	\$30.81	\$30.8	\$30.8	\$30.81
Total	\$70.27	\$70.27	\$70.3	\$70.3	\$70.27
Environmental Phase (Expended)					
Capital Outlay Support	\$97.70	\$97.70	\$97.7	\$97.7	\$97.74
Project Expenditures, Pre-splits					
Capital Outlay Support	\$44.90	\$44.90	\$44.9	\$44.9	\$44.88
Non-project Specific Costs					
Capital Outlay Support	\$20.00	\$19.00	\$19.0	\$19.0	\$3.23
Subtotal East Span Capital Outlay Support	\$959.30	\$959.30	\$977.1	\$977.1	\$646.61
Subtotal East Span Capital Outlay and Sunk Costs	\$4,492.19	\$4,711.00	\$4,745.2	\$4,890.3	\$2,541.21
Other Budgeted Capital	\$35.11	\$31.81	\$7.7	\$7.7	\$0.68
Total SFOBB East Span	\$5,486.60	\$5,702.11	\$5,730.0	\$5,875.1	\$3,188.50

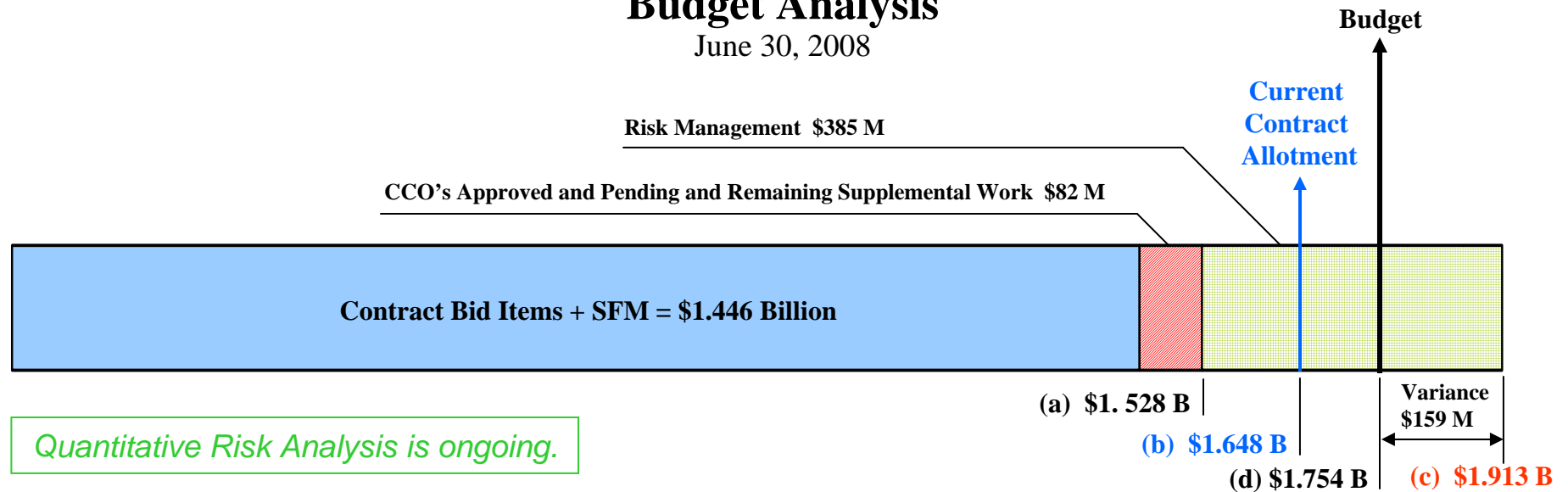
<sup>(1)</sup> Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority.

(Due to the rounding of numbers, the totals above are shown within \$0.02).

# SAS Superstructure Contract 04-0120F4

## Budget Analysis

June 30, 2008



**Contract 04-0120F4 SAS Superstructure**  
**Current Contract Budget Funding Status**  
 June 30, 2008 Basis

Contract Bid Items	\$	1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475
Subtotal	\$	1,446,559,410
Supplemental Work	\$	52,418,000
Contingency at 10%	\$	148,652,590
Subtotal Original Contract Allotment	\$	1,647,630,000
Supplemental Budget Allocation Approved	\$	-
Subtotal Current Contract Allotment	\$	1,647,630,000 (b)
Remaining Unallotted Budget (Current Contract Budget - Current Contract Allotment)	\$	106,070,000
<b>Total Current Contract Budget</b>	<b>\$</b>	<b>1,753,700,000 (d)</b>

Reported Total Forecast At Completion \$1,767,400,000  
 In 1st Quarter 2008 TBSRP Report

**Contract 04-0120F4 SAS Superstructure**  
**Contract Forecast At Completion (FAC) & Variance**  
 June 30, 2008 Basis

Contract Bid Items	\$	1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475
Subtotal	\$	1,446,559,410
Supplemental Work Remaining	\$	52,418,000
CCO's		
CCO's (Approved (38) + Pending (64) = Total (102))	\$	26,883,243
CCO's = or > \$1Million Pending POC's approval (1)	\$	1,870,124
Subtotal	\$	1,527,730,777 (a)
Risk Management	\$	384,805,000
<b>Total</b>	<b>\$</b>	<b>1,912,535,777 (c)</b>

Variance ( Total - Current Budget ) \$ 158,835,777

*Confidential Draft – For Deliberative Purpose Only*

## **ITEM 4: PROGRESS REPORTS**

- a. Draft Third Quarter Report, September 30,  
2008

**TO:** Toll Bridge Program Oversight Committee      **DATE:** October 29, 2008  
(TBPOC)

**FR:** Andrew Fremier, Deputy Executive Director, BATA

**RE:** Agenda No. - 4a  
Progress Reports  
Item- Draft Third Quarter Report, September 30, 2008

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**Recommendation:**

For Information / **APPROVAL**

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

Attached, for information, is the 3rd Quarter 2008 Report Production Schedule, which reflects the status of completed report tasks and the schedule for remaining actions.

Also included in this package is the Draft Third Quarter Report, September 30, 2008. The TBPOC is requested to grant the PMT authority to approve this report on its behalf after appropriate reviews and final comments on the proposed final draft are received.

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**Attachment(s):**

1. Projected 3rd Quarter 2008 Report Production Schedule
2. Appendix A1, A2 and B
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# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

## 3rd Quarter 2008 Report Production Schedule

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Expenditure Update (Anticipated Date)	Monday, October 20, 2008
BAMC Incorporate Comments; Produce Proposed Final Draft for TBPOC and Agency	Tuesday, October 21, 2008
BAMC Issue Proposed Final Draft to TBPOC & Agency	Thursday, October 23, 2008
TBPOC and Agency Review / Comment on Proposed Final Draft	<b>Friday, October 31, 2008</b>
BAMC Incorporate Comments: Produce Advanced Final Draft + Table of Conflicting Comments	Wednesday, November 05, 2008
TBPOC Teleconference to make Final Comments and Resolve Conflicting Comments	Friday, November 07, 2008
BAMC Incorporate All Final Comments from TBPOC; Emails Final Version for Information	Tuesday, November 11, 2008
Produce & Issue Quarterly Report to Legislature & CTC	<b>Wednesday, November 12, 2008</b>

Toll Bridge Seismic Retrofit Program						
AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through September 30, 2008						
(Dollars in millions)						
Bridge		AB 144/SB 66 Baseline	TBPOC Approved Budget	2nd Quarter 2008 Forecast	3rd Quarter 2008 Forecast	Expenditures Through September 30, 2008
Benicia-Martinez						
	Capital Outlay Support	\$38.14	\$38.14	\$38.1	\$38.1	\$38.09
	Capital Outlay	\$139.69	\$139.69	\$139.7	\$139.7	\$139.72
	Total	\$177.83	\$177.83	\$177.8	\$177.8	\$177.81
Carquinez						
	Capital Outlay Support	\$28.67	\$28.67	\$28.7	\$28.7	\$28.79
	Capital Outlay	\$85.46	\$85.46	\$85.5	\$85.5	\$85.40
	Total	\$114.13	\$114.13	\$114.2	\$114.2	\$114.19
San Mateo-Hayward						
	Capital Outlay Support	\$28.14	\$28.14	\$28.1	\$28.1	\$28.11
	Capital Outlay	\$135.37	\$135.37	\$135.4	\$135.4	\$135.32
	Total	\$163.51	\$163.51	\$163.5	\$163.5	\$163.43
Vincent Thomas						
	Capital Outlay Support	\$16.42	\$16.42	\$16.4	\$16.4	\$16.37
	Capital Outlay	\$42.09	\$42.09	\$42.1	\$42.1	\$42.04
	Total	\$58.51	\$58.51	\$58.5	\$58.5	\$58.41
San Diego-Coronado						
	Capital Outlay Support	\$33.50	\$33.50	\$33.5	\$33.5	\$33.21
	Capital Outlay	\$70.02	\$70.02	\$70.0	\$70.0	\$69.39
	Total	\$103.52	\$103.52	\$103.5	\$103.5	\$102.60
Richmond-San Rafael						
	Capital Outlay Support	\$134.00	\$127.00	\$127.0	\$127.0	\$126.69
	Capital Outlay	\$698.00	\$689.50	\$689.5	\$689.5	\$668.11 *
	Richmond-San Rafael Project Reserves	\$82.00				
	Total	\$914.00	\$816.50	\$816.5	\$816.5	\$794.80
West Span Retrofit						
	Capital Outlay Support	\$75.00	\$75.00	\$75.0	\$75.0	\$74.81
	Capital Outlay	\$232.90	\$232.90	\$232.9	\$232.9	\$227.21
	Total	\$307.90	\$307.90	\$307.9	\$307.9	\$302.02
West Approach						
	Capital Outlay Support	\$120.00	\$120.00	\$120.0	\$120.0	\$109.98
	Capital Outlay	\$309.00	\$333.70	\$350.7	\$350.7	\$292.43
	Total	\$429.00	\$453.70	\$470.7	\$470.7	\$402.41
SFOBB East Span						
	Capital Outlay Support	\$959.30	\$959.30	\$977.1	\$977.1	\$646.61
	Capital Outlay	\$4,492.19	\$4,711.00	\$4,745.2	\$4,890.3	\$2,541.21
	Other Budgeted Capital	\$35.11	\$31.81	\$7.7	\$7.7	\$0.68
	Total	\$5,486.60	\$5,702.11	\$5,730.0	\$5,875.1	\$3,188.50
	Program Indirect	\$30.00	\$30.00	\$30.0	\$30.0	\$24.74
	Subtotal Capital Outlay Support	\$1,463.17	\$1,456.17	\$1,473.9	\$1,473.9	\$1,127.40
	Subtotal Capital Outlay	\$6,321.83	\$6,471.54	\$6,498.7	\$6,643.8	\$4,201.51
	Subtotal Toll Seismic Retrofit	\$7,785.00	\$7,927.71	\$7,972.6	\$8,117.7	\$5,328.91
	Program Contingency	\$900.00	\$757.29	\$712.4	\$567.3	
	Total Toll Seismic Retrofit Program	\$8,685.00	\$8,685.00	\$8,685.0	\$8,685.0	\$5,328.91

Notes:

\* Budget for Richmond-San Rafael Bridge includes \$16.9 million of deck joint rehabilitation work that considered to be eligible for seismic retrofit program funding.  
(Due to the rounding of numbers, the totals above are show within \$0.02).

Toll Bridge Seismic Retrofit Program						
AB 144 Baseline Budget, Forecasts and Expenditures Through September 30, 2008						
(Dollars in millions)						
	Column A	Column B	Column C	Column D	Column E	
Bridge	AB 144/ SB 66 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances As of September 30, 2008 See Note (1)	Estimated Costs not yet Spent or Encumbered As of September 30, 2008	Total Forecast As of September 30, 2008	
(Columns C +D)						
Other Completed Projects						
	Capital Outlay Support	\$144.87	\$144.87	\$144.59	\$0.31	\$144.9
	Capital Outlay	\$472.63	\$472.63	\$472.59	\$0.11	\$472.7
	Total	\$617.50	\$617.50	\$617.18	\$0.42	\$617.6
Richmond-San Rafael						
	Capital Outlay Support	\$134.00	\$127.00	\$126.68	\$0.32	\$127.0
	Capital Outlay	\$698.00	\$689.50	\$674.78	\$14.72	\$689.5
	Project Reserves	\$82.00				
	Total	\$914.00	\$816.50	\$801.46	\$15.04	\$816.5
West Span Retrofit						
	Capital Outlay Support	\$75.00	\$75.00	\$74.81	\$0.19	\$75.0
	Capital Outlay	\$232.90	\$232.90	\$232.80	\$0.10	\$232.9
	Total	\$307.90	\$307.90	\$307.61	\$0.29	\$307.9
West Approach						
	Capital Outlay Support	\$120.00	\$120.00	\$111.33	\$8.67	\$120.0
	Capital Outlay	\$309.00	\$333.70	\$324.76	\$25.94	\$350.7
	Total	\$429.00	\$453.70	\$436.09	\$34.61	\$470.7
SFOBB East Span -Skyway						
	Capital Outlay Support	\$197.00	\$181.00	\$181.45	-\$0.45	\$181.0
	Capital Outlay	\$1,293.00	\$1,254.10	\$1,400.09	-\$145.99	\$1,254.1
	Total	\$1,490.00	\$1,435.10	\$1,581.54	-\$146.44	\$1,435.1
SFOBB East Span -SAS- Superstructure						
	Capital Outlay Support	\$214.63	\$214.63	\$111.56	\$103.04	\$214.6
	Capital Outlay	\$1,753.72	\$1,753.72	\$1,649.64	\$262.86	\$1,912.5
	Total	\$1,968.35	\$1,968.35	\$1,761.20	\$365.90	\$2,127.1
SFOBB East Span -SAS- Foundations						
	Capital Outlay Support	\$62.50	\$41.00	\$37.58	\$3.42	\$41.0
	Capital Outlay	\$339.91	\$307.30	\$308.73	-\$1.43	\$307.3
	Total	\$402.41	\$348.30	\$346.31	\$1.99	\$348.3
Small YBI Projects						
	Capital Outlay Support	\$10.58	\$10.58	\$10.17	\$0.43	\$10.6
	Capital Outlay	\$15.66	\$15.66	\$16.24	-\$0.54	\$15.7
	Total	\$26.24	\$26.24	\$26.41	-\$0.11	\$26.3
South/South Detour						
	Capital Outlay Support	\$29.50	\$66.00	\$51.91	\$14.09	\$66.0
	Capital Outlay	\$131.92	\$442.20	\$367.21	\$93.99	\$461.2
	Total	\$161.42	\$508.20	\$419.12	\$108.08	\$527.2
YBI - Transition Structures						
	Capital Outlay Support	\$78.65	\$78.65	\$16.39	\$62.31	\$78.7
	Capital Outlay	\$299.36	\$276.10	\$0.09	\$276.01	\$276.1
	Total	\$378.01	\$354.75	\$16.48	\$338.32	\$354.8
Oakland Touchdown						
	Capital Outlay Support	\$74.40	\$74.40	\$45.40	\$46.70	\$92.1
	Capital Outlay	\$283.80	\$283.80	\$219.08	\$83.42	\$302.5
	Total	\$358.20	\$358.20	\$264.48	\$130.12	\$394.6
East Span Other Small Project						
	Capital Outlay Support	\$212.32	\$213.32	\$202.81	\$10.49	\$213.3
	Capital Outlay	\$170.78	\$170.78	\$93.01	\$53.59	\$146.6
	Total	\$383.10	\$384.10	\$295.82	\$64.08	\$359.9
Existing Bridge Demolition						
	Capital Outlay Support	\$79.72	\$79.72	\$0.35	\$79.35	\$79.7
	Capital Outlay	\$239.15	\$239.15	\$0.00	\$222.00	\$222.0
	Total	\$318.87	\$318.87	\$0.35	\$301.35	\$301.7
	Miscellaneous Program Costs	\$30.00	\$30.00	\$26.08	\$3.92	\$30.0
	Total Capital Outlay Support (2)	\$1,463.17	\$1,456.17	\$1,141.11	\$332.79	\$1,473.9
	Total Capital Outlay	\$6,321.83	\$6,471.54	\$5,759.02	\$884.78	\$6,643.8
	Program Total	\$7,785.00	\$7,927.71	\$6,900.13	\$1,217.57	\$8,117.7

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

(2). Total Capital Outlay Support includes program indirect costs.

(Due to the rounding of numbers, the totals above are shown within \$0.02).



Toll Bridge Seismic Retrofit Program - SFOBB East Span Only						
AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through September 30, 2008						
(Dollars in millions)						
East Span Contract		AB 144/SB 66 Baseline	TBPOC Current Approved Budget	2ndQuarter 2008 Forecast	3rd Quarter 2008 Forecast	Expenditures Through September 30, 2008
SFOBB East Span -Skyway						
	Capital Outlay Support	\$197.00	\$181.00	\$181.0	\$181.0	\$180.81
	Capital Outlay	\$1,293.00	\$1,254.10	\$1,254.1	\$1,254.1	\$1,236.48
	Total	\$1,490.00	\$1,435.10	\$1,435.1	\$1,435.1	\$1,417.29
SFOBB East Span -SAS- Superstructure						
	Capital Outlay Support	\$214.63	\$214.63	\$214.6	\$214.6	\$105.61
	Capital Outlay	\$1,753.72	\$1,753.72	\$1,767.4	\$1,912.5	\$528.92
	Total	\$1,968.35	\$1,968.35	\$1,982.0	\$2,127.1	\$634.53
SFOBB East Span -SAS- W2 Foundations						
	Capital Outlay Support	\$10.00	\$10.00	\$10.0	\$10.0	\$9.20
	Capital Outlay	\$26.40	\$26.40	\$26.4	\$26.4	\$25.82
	Total	\$36.40	\$36.40	\$36.4	\$36.4	\$35.02
SFOBB East Span -SAS- E2/T1 Foundations						
	Capital Outlay Support	\$52.50	\$31.00	\$31.0	\$31.0	\$28.26
	Capital Outlay	\$313.51	\$280.90	\$280.9	\$280.9	\$274.49
	Total	\$366.01	\$311.90	\$311.9	\$311.9	\$302.75
YBI/SAS (Archeology)						
	Capital Outlay Support	\$1.08	\$1.08	\$1.1	\$1.1	\$1.08
	Capital Outlay	\$1.06	\$1.06	\$1.1	\$1.1	\$1.06
	Total	\$2.14	\$2.14	\$2.2	\$2.2	\$2.14
YBI - USCG Rd Relocation						
	Capital Outlay Support	\$3.00	\$3.00	\$3.0	\$3.0	\$2.67
	Capital Outlay	\$3.00	\$3.00	\$3.0	\$3.0	\$2.81
	Total	\$6.00	\$6.00	\$6.0	\$6.0	\$5.48
YBI - Substation & Viaduct						
	Capital Outlay Support	\$6.50	\$6.50	\$6.5	\$6.5	\$6.43
	Capital Outlay	\$11.60	\$11.60	\$11.6	\$11.6	\$11.30
	Total	\$18.10	\$18.10	\$18.1	\$18.1	\$17.73
South/South Detour						
	Capital Outlay Support	\$29.50	\$66.00	\$66.0	\$66.0	\$49.83
	Capital Outlay	\$131.92	\$442.20	\$461.2	\$461.2	\$233.17
	Total	\$161.42	\$508.20	\$527.2	\$527.2	\$283.00
YBI - Transition Structures (Total, including the following split contracts and prior-to-split expenditures)						
	Capital Outlay Support	\$78.65	\$78.65	\$78.7	\$78.7	\$21.52
	Capital Outlay	\$299.36	\$276.10	\$276.1	\$276.1	\$0.00
	Total	\$378.01	\$354.75	\$354.8	\$354.8	\$21.52
YBI- Transition Structures Contract No. 1						
	Capital Outlay Support			\$45.0	\$45.0	\$3.41
	Capital Outlay			\$214.3	\$214.3	\$0.00
	Total			\$259.3	\$259.3	\$3.41
YBI- Transition Structures Contract No. 2						
	Capital Outlay Support			\$16.0	\$16.0	\$1.71
	Capital Outlay			\$58.5	\$58.5	\$0.00
	Total			\$74.5	\$74.5	\$1.71
YBI- Transition Structures Contract No. 3 - Landscape						
	Capital Outlay Support			\$1.0	\$1.0	\$0.00
	Capital Outlay			\$3.3	\$3.3	\$0.00
	Total			\$4.3	\$4.3	\$0.00
Oakland Touchdown (Total, including the following split contracts and prior-to-split expenditures)						
	Capital Outlay Support	\$74.40	\$74.40	\$92.1	\$92.1	\$43.25
	Capital Outlay	\$283.80	\$283.80	\$302.5	\$302.5	\$123.05
	Total	\$358.20	\$358.20	\$394.6	\$394.6	\$166.30
Oakland Touchdown Contract No. 1						
	Capital Outlay Support	\$0.00	\$49.90	\$49.9	\$49.9	\$20.70
	Capital Outlay	\$0.00	\$226.50	\$226.5	\$226.5	\$115.18
	Total	\$0.00	\$276.40	\$276.4	\$276.4	\$135.88
Oakland Touchdown Contract No. 2						
	Capital Outlay Support	\$0.00	\$0.00	\$15.8	\$15.8	\$1.19
	Capital Outlay	\$0.00	\$0.00	\$62.0	\$62.0	\$0.00

Toll Bridge Seismic Retrofit Program - SFOBB East Span Only					
AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through September 30, 2008					
(Dollars in millions)					
East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget	2ndQuarter 2008 Forecast	3rd Quarter 2008 Forecast	Expenditures Through September 30, 2008
Total	\$0.00	\$0.00	\$77.8	\$77.8	\$1.19
Oakland Touchdown Contract - Electrical Systems					
Capital Outlay Support	\$0.00	\$0.00	\$1.4	\$1.4	\$0.45
Capital Outlay	\$0.00	\$0.00	\$4.4	\$4.4	\$0.00
Total	\$0.00	\$0.00	\$5.8	\$5.8	\$0.45
Oakland Touchdown Contract - Navy Cable <sup>(1)</sup>					
Capital Outlay Support	\$0.00	\$0.00	\$3.0	\$3.0	\$0.87
Capital Outlay	\$0.00	\$0.00	\$9.6	\$9.6	\$7.87
Total	\$0.00	\$0.00	\$12.6	\$12.6	\$8.74
Oakland Geofill					
Capital Outlay Support	\$2.47	\$2.47	\$2.5	\$2.5	\$2.51
Capital Outlay	\$8.21	\$8.21	\$8.2	\$8.2	\$8.21
Total	\$10.68	\$10.68	\$10.7	\$10.7	\$10.72
Pile Installation Demonstration Project					
Capital Outlay Support	\$1.79	\$1.79	\$1.8	\$1.8	\$1.79
Capital Outlay	\$9.25	\$9.25	\$9.2	\$9.2	\$9.25
Total	\$11.04	\$11.04	\$11.0	\$11.0	\$11.04
Existing Bridge Demolition					
Capital Outlay Support	\$79.72	\$79.72	\$79.7	\$79.7	\$0.35
Capital Outlay	\$239.15	\$239.15	\$222.0	\$222.0	\$0.00
Total	\$318.87	\$318.87	\$301.7	\$301.7	\$0.35
Stormwater Treatment Measures					
Capital Outlay Support	\$6.00	\$8.00	\$8.0	\$8.0	\$7.99
Capital Outlay	\$15.00	\$18.30	\$18.3	\$18.3	\$16.56
Total	\$21.00	\$26.30	\$26.3	\$26.3	\$24.55
Right-of-way and Environmental Mitigation					
Capital Outlay Support	\$0.00	\$0.00	\$0.0	\$0.0	\$0.00
Capital Outlay	\$72.40	\$72.40	\$72.4	\$72.4	\$39.28
Total	\$72.40	\$72.40	\$72.4	\$72.4	\$39.28
Sunk Cost - Existing East Span Retrofit					
Capital Outlay Support	\$39.46	\$39.46	\$39.5	\$39.5	\$39.46
Capital Outlay	\$30.81	\$30.81	\$30.8	\$30.8	\$30.81
Total	\$70.27	\$70.27	\$70.3	\$70.3	\$70.27
Environmental Phase (Expended)					
Capital Outlay Support	\$97.70	\$97.70	\$97.7	\$97.7	\$97.74
Project Expenditures, Pre-splits					
Capital Outlay Support	\$44.90	\$44.90	\$44.9	\$44.9	\$44.88
Non-project Specific Costs					
Capital Outlay Support	\$20.00	\$19.00	\$19.0	\$19.0	\$3.23
Subtotal East Span Capital Outlay Support	\$959.30	\$959.30	\$977.1	\$977.1	\$646.61
Subtotal East Span Capital Outlay and Sunk Costs	\$4,492.19	\$4,711.00	\$4,745.2	\$4,890.3	\$2,541.21
Other Budgeted Capital	\$35.11	\$31.81	\$7.7	\$7.7	\$0.68
Total SFOBB East Span	\$5,486.60	\$5,702.11	\$5,730.0	\$5,875.1	\$3,188.50

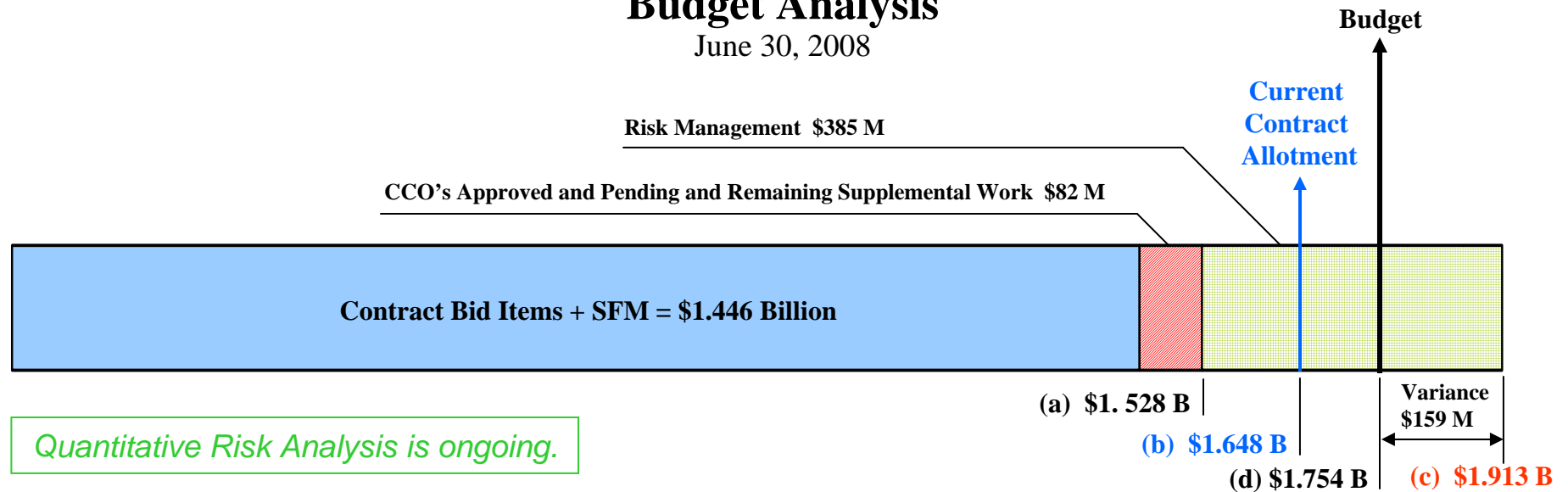
<sup>(1)</sup> Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority.

(Due to the rounding of numbers, the totals above are shown within \$0.02).

# SAS Superstructure Contract 04-0120F4

## Budget Analysis

June 30, 2008



**Contract 04-0120F4 SAS Superstructure**  
**Current Contract Budget Funding Status**  
 June 30, 2008 Basis

Contract Bid Items	\$	1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475
Subtotal	\$	1,446,559,410
Supplemental Work	\$	52,418,000
Contingency at 10%	\$	148,652,590
Subtotal Original Contract Allotment	\$	1,647,630,000
Supplemental Budget Allocation Approved	\$	-
Subtotal Current Contract Allotment	\$	1,647,630,000 (b)
Remaining Unallotted Budget (Current Contract Budget - Current Contract Allotment)	\$	106,070,000
<b>Total Current Contract Budget</b>	<b>\$</b>	<b>1,753,700,000 (d)</b>

Reported Total Forecast At Completion \$1,767,400,000  
 In 1st Quarter 2008 TBSRP Report

**Contract 04-0120F4 SAS Superstructure**  
**Contract Forecast At Completion (FAC) & Variance**  
 June 30, 2008 Basis

Contract Bid Items	\$	1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475
Subtotal	\$	1,446,559,410
Supplemental Work Remaining	\$	52,418,000
CCO's		
CCO's (Approved (38) + Pending (64) = Total (102))	\$	26,883,243
CCO's = or > \$1Million Pending POC's approval (1)	\$	1,870,124
Subtotal	\$	1,527,730,777 (a)
Risk Management	\$	384,805,000
<b>Total</b>	<b>\$</b>	<b>1,912,535,777 (c)</b>

Variance ( Total - Current Budget ) \$ 158,835,777

*Confidential Draft – For Deliberative Purpose Only*

# Toll Bridge Seismic Retrofit Program Report

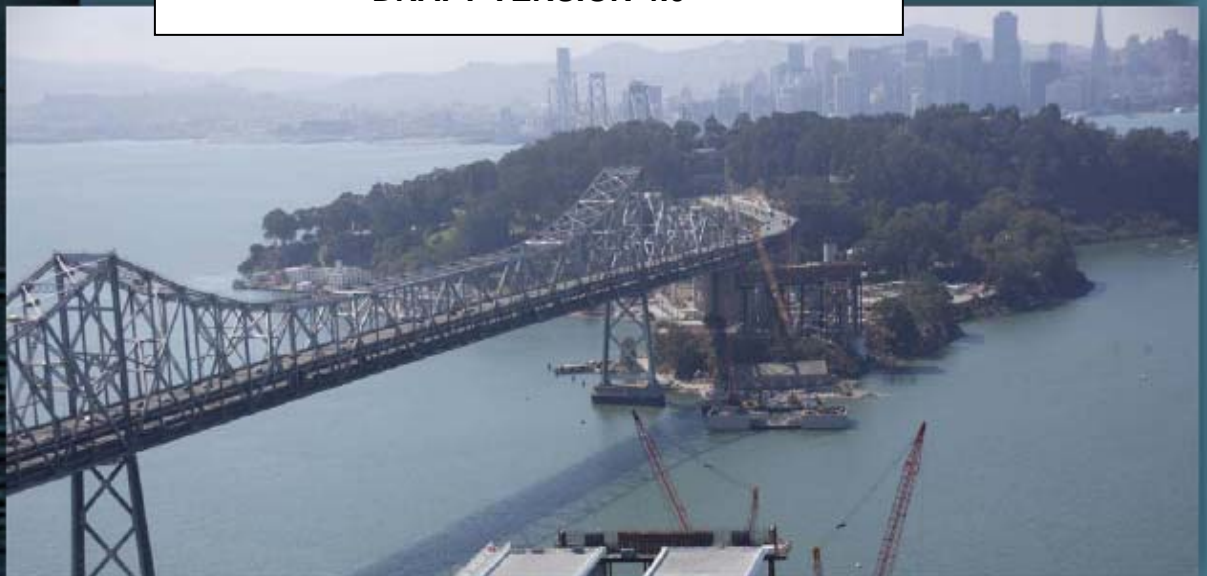


## TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION



DRAFT VERSION 4.0



**Third Quarter Report**  
September 30, 2008



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## Executive Summary

The Toll Bridge Program Oversight Committee (TBPOC) submits the 2008 Third Quarter Report ending September 30, 2008 for the Toll Bridge Seismic Retrofit Program (TBSRP) in accordance with Assembly Bill (AB) 144 and Senate Bill (SB) 66. This report provides the following:

1. Information on the progress of each project in the program
2. Baseline budget for Capital Outlay (CO) and Capital Outlay Support (COS)
3. Current projected costs for CO and COS
4. Expenditures to date
5. Comparison of the baseline schedule to the December 2007 projected schedule
6. Summary of the milestones achieved during the quarter
7. Major risk assessment for the remaining projects
8. Summary of expenses incurred by the TBPOC in performing its duties

### Major Highlights during the Third Quarter 2008

Of the seven toll bridges in the TBSRP, only the San Francisco-Oakland Bay Bridge (SFOBB) remains to be retrofitted. Highlights of major milestones and actions made during the quarter include:

- On the SFOBB West Approach Project, the westbound traffic was shifted to the south on August 27, 2008, which allowed for the demolition of the temporary westbound upper deck widening. The permanent Sterling on-ramp is scheduled to open before the 2008 Thanksgiving holiday and the Harrison off-ramp will be open to traffic in mid-December.

The project is forecast to be completed seven months ahead of schedule in January 2009. To achieve early project completion and minimize impacts to the local community and the traveling public, the TBPOC has approved a



SAS – E2 Crossbeam Temporary Supports



SAS – Shearleg Crane Barge Boom

number of contract changes that have increased the final cost of the project (see page 5 – *Table 2*). The costs of these changes are within the TBSRP program contingency and will result in no change to the overall program budget. (See project notes on page 11.)

- As part of the SFOBB East Span Seismic Replacement Project, the Self-Anchored Suspension Span (SAS) contract is constructing the superstructure of the signature span between the Skyway and Yerba Buena Island (YBI). Work is occurring both in the Bay Area and around the world to complete the span.

American Bridge/Fluor, the prime contractor on the project, is performing civil work both on YBI and out on the bay with construction of the W2 and E2 support piers and with the erection of temporary support structures along the path of the future SAS.

Fabrication of the steel SAS tower and deck sections is ongoing in China at Zhenhua Port Machinery Company (ZPMC), the steel fabrication subcontractor. ZPMC is also **completing** a shearleg crane **to lift the bridge**

**components into place.** The cable saddles for the SAS are under fabrication in Japan.

- A forecast \$158.8 million increase for the SAS superstructure contract to cover delay risks and other challenges as identified in the second quarter 2008 risk management effort. The contractor has reported that the steel roadway segments are four to five months behind their schedule.

While the contractor and Caltrans are working to develop opportunities for acceleration to mitigate this delay, the second quarter 2008 risk management effort is accounting for the risk in the project forecast.

- The Yerba Buena Island Detour contract (YBID) is constructing a temporary detour structure from the Yerba Buena Island tunnel to the existing east span. The contract is making progress on the temporary detour viaduct and on advanced work on a number of foundations for the future transition structure from the SAS to the tunnel. Clearly visible to the traveling public, the double-deck steel truss of the temporary detour viaduct is being pieced together just south of the existing bridge.



YBID - Viaduct Bent 51



The contract originally intended to put traffic on a temporary detour in 2006 to meet an earlier east span replacement schedule. The current revised schedule will not have traffic on the temporary detour until 2009. To better integrate the contract into the revised project schedule, the TBPOC has approved a number of changes to the contract. These changes included adding the deck replacement work near the tunnel that was rolled into place over Labor Day Weekend 2007, advancing future transition structure foundation work and making design enhancement to the temporary detour structure. Significant construction risks have been identified that will require additional funds to be budgeted for the **YBID contract**. In June 2008, the TBPOC approved a revised project budget of \$442.2 million for the project, which is \$107.8 million higher than the previously approved budget. The revised forecast for the project is \$461.2 million, which includes additional contingencies to cover the potential project risks. The budget change will be funded from the TBSRP program contingency and redirected project savings from the E2/T1,



*YBID Advanced Work Column W4R*

Skyway, Richmond-San Rafael Bridge contracts. (See page 5 – *Table 2* and project notes starting on page 16.)



*YBID – Viaduct Span 48, 49 & 50*

## Program Overview

Seven of the nine state-owned toll bridges were identified for seismic retrofit in the TBSRP:

1. Benicia-Martinez Bridge
2. Carquinez Bridge
3. San Mateo-Hayward Bridge
4. Vincent Thomas Bridge
5. San Diego-Coronado Bridge
6. Richmond-San Rafael Bridge
7. SFOBB (West Span, West Approach replacement, and East Span replacement)

Seismic retrofit of these complex structures presents an extremely difficult engineering challenge. Nowhere in the world has a bridge seismic safety program of this size been undertaken.

As shown in *Table 1-TBSRP Project Status*, a significant portion of the TBSRP is complete. Only the East Span Seismic Replacement projects remain to be seismically retrofitted.

The third quarter 2008 forecast indicates that the TBSRP projects will be completed within the overall current TBPOC approved program budget. *Tables 2 and 3* on the following pages provide a summary of the cost, schedule and status of all the TBSRP projects.

The Dumbarton and Antioch bridges were not originally included in the TBSRP. Further seismic vulnerability studies were completed and retrofit strategies have been proposed for both bridges. (See discussion on pages 27 and 28).

**Table 1-TBSRP Project Status**

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Carquinez Bridge Eastbound Seismic Retrofit	Complete
Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

**Table 2-Toll Bridge Seismic Retrofit Program—Cost Summary (\$ Millions)**

Project	Work Status	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
<b>SFOBB East Span Replacement Project</b>								
Capital Outlay Support		959.3	-	959.3	646.6	977.1	17.8	●
Capital Outlay Construction								
Skyway	Complete	1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-	●
SAS E2/T1 Foundations	Construction	313.5	(32.6)	280.9	274.5	280.9	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	528.9	1,912.5	158.8	●
YBI Detour	Design/Const	132.0	310.2	442.2	233.2	461.2	19.0	●
YBI Transition Structures		299.3	(23.2)	276.1	-	276.1	-	●
* YBITS Contract No. 1	Design				-	214.3		
* YBITS Contract No. 2	Design				-	58.5		
* YBITS Contract No. 3 - Landscape	Design				-	3.3		
Oakland Touchdown (OTD)		283.8	-	283.8	123.0	302.5	18.7	
* OTD Submarine Cable	Complete				7.9	9.6		●
* OTD No. 1 (Westbound)	Construction				115.2	226.5		●
* OTD No. 2 (Eastbound)	Design				-	62.0		●
* OTD Electrical Systems	Design				-	4.4		●
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	●
Stormwater Treatment Measures	Construction	15.0	3.3	18.3	16.6	18.3	-	●
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	39.3	72.4	-	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	
<b>Total SFOBB East Span Replacement Project</b>		<b>5,486.6</b>	<b>215.5</b>	<b>5,702.1</b>	<b>3,188.5</b>	<b>5,875.1</b>	<b>173.0</b>	
<b>SFOBB West Approach Replacement</b>	Construction							●
Capital Outlay Support		120.0	-	120.0	110.0	120.0	-	
Capital Outlay Construction		309.0	24.7	333.7	292.5	350.7	17.0	●
<b>Total SFOBB West Approach Replacement</b>		<b>429.0</b>	<b>24.7</b>	<b>453.7</b>	<b>402.5</b>	<b>470.7</b>	<b>17.0</b>	
<b>Richmond-San Rafael Bridge Retrofit</b>	Complete							●
Capital Outlay Support		134.0	(7.0)	127.0	126.7	127.0	-	
Capital Outlay Construction & Right-of-Way		780.0	(90.5)	689.5	668.1	689.5	-	
<b>Total Richmond-San Rafael Bridge Retrofit</b>		<b>914.0</b>	<b>(97.5)</b>	<b>816.5</b>	<b>794.8</b>	<b>816.5</b>	<b>-</b>	
<b>Program Completed Projects</b>	Complete							
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	699.0	705.6	-	
<b>Total Program Completed Projects</b>		<b>925.4</b>	<b>-</b>	<b>925.4</b>	<b>918.4</b>	<b>925.4</b>	<b>-</b>	
<b>Miscellaneous Program Costs</b>		<b>30.0</b>	<b>-</b>	<b>30.0</b>	<b>24.7</b>	<b>30.0</b>	<b>-</b>	
<b>Program Contingency</b>		<b>900.0</b>	<b>(142.7)</b>	<b>757.3</b>	<b>-</b>	<b>567.3</b>	<b>(190.0)</b>	
<b>Total Toll Bridge Seismic Retrofit Program</b>		<b>8,685.0</b>	<b>-</b>	<b>8,685.0</b>	<b>5,328.9</b>	<b>8,685.0</b>	<b>-</b>	

● Within Approved Schedule and Budget  
 ● Potential Cost and Schedule Impacts: Likely future need for Program Contingency Allocation  
 ● Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming  
 Note: Details may not sum to totals due to rounding effects.

**Table 3-Toll Bridge Seismic Retrofit Program—Schedule Summary**

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2008)	Project Complete Schedule Forecast (09/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = b + c	e	f = e - d	g	h
SFOBB East Span Replacement Project Skyway	Apr 07	8	Dec 07	Dec 07	-	●	See Note. Go to Page 25, Risk Management Program, for more information.
SAS E2/T1 Foundations	Jun 08	(3)	Mar 08	Jan 08	(2)	●	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	●	
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	●	
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	●	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	●	
• OTD Submarine Cable	n/a		Jan 08	Jan 08	-	●	
• OTD Westbound	n/a		Jan 10	Jan 10	-	●	
• OTD Eastbound	n/a		Nov 14	Nov 14	-	●	
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	●	
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	●	
Open-to-Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	●	
Open-to-Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	●	
SFOBB West Approach Replacement	Aug 09	-	Aug 09	Jan 2009	(7)	●	Open To Traffic.
• Open-to-Traffic Date: Mainline		-		April 2008			
Richmond-San Rafael Bridge		-					Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005.
• Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	●	
• Public Access Project	n/a	-	May 07	Sept 07	4	●	

*Note: Schedules for selected projects and the Open-to-Traffic dates were extended by 12 months from the AB 144/SB 66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract in response to bidder inquiries and to reduce costs.*

## Program Costs

### Baseline and Projected Budget

The 2005 AB 144/SB 66 budget is \$7.785 billion for Capital Outlay (CO) and Capital Outlay Support (COS) plus \$900 million in program contingency for a total baseline budget of \$8.685 billion. The third quarter 2008 forecast for the program remains steady at the \$8.685 billion budget. The third quarter 2008 forecast for the SFOBB East Span Project is \$5.875.1 billion and is based on revised construction estimates as generated from the second quarter 2008 risk management effort.

Additional cost estimate and expenditure details for the TBSRP are included in Appendices A-1 and A-2. The details of the cost estimates and expenditures for the SFOBB East Span are shown in Appendix B.



YBID Advanced Work Completed Column W4L

**Table 4-Toll Bridge Seismic Retrofit Program Cost (\$ Millions)**

Contracts	AB 144 / SB 66 Baseline Budget	Approved Changes	Current Approved Budget	3rd Quarter 2008 Forecast	Difference from Current Approved Budget
<b>Completed Projects</b>					
Benicia-Martinez	177.8	-	177.8	177.8	-
Carquinez	114.2	-	114.2	114.2	-
San Mateo-Hayward	163.5	-	163.5	163.5	-
Vincent Thomas	58.5	-	58.5	58.5	-
San Diego-Coronado	103.5	-	103.5	103.5	-
SFOBB West Span	307.9	-	307.9	307.9	-
<b>Ongoing Projects</b>					
Richmond-San Rafael	914.0	(97.5)	816.5	816.5	-
SFOBB West Approach	429.0	24.7	453.7	470.7	17.0
SFOBB East Span	5,486.6	215.5	5,702.1	5,875.1	173.0
Miscellaneous Program Costs	30.0	-	30.0	30.0	-
<b>Subtotal</b>	<b>7,785.0</b>	<b>142.7</b>	<b>7,927.7</b>	<b>8,117.7</b>	<b>190.0</b>
Program Contingency	900.0	(142.7)	757.3	567.3	(190.0)
<b>Total Program</b>	<b>8,685.0</b>	<b>-</b>	<b>8,685.0</b>	<b>8,685.0</b>	<b>-</b>



## Program Schedule

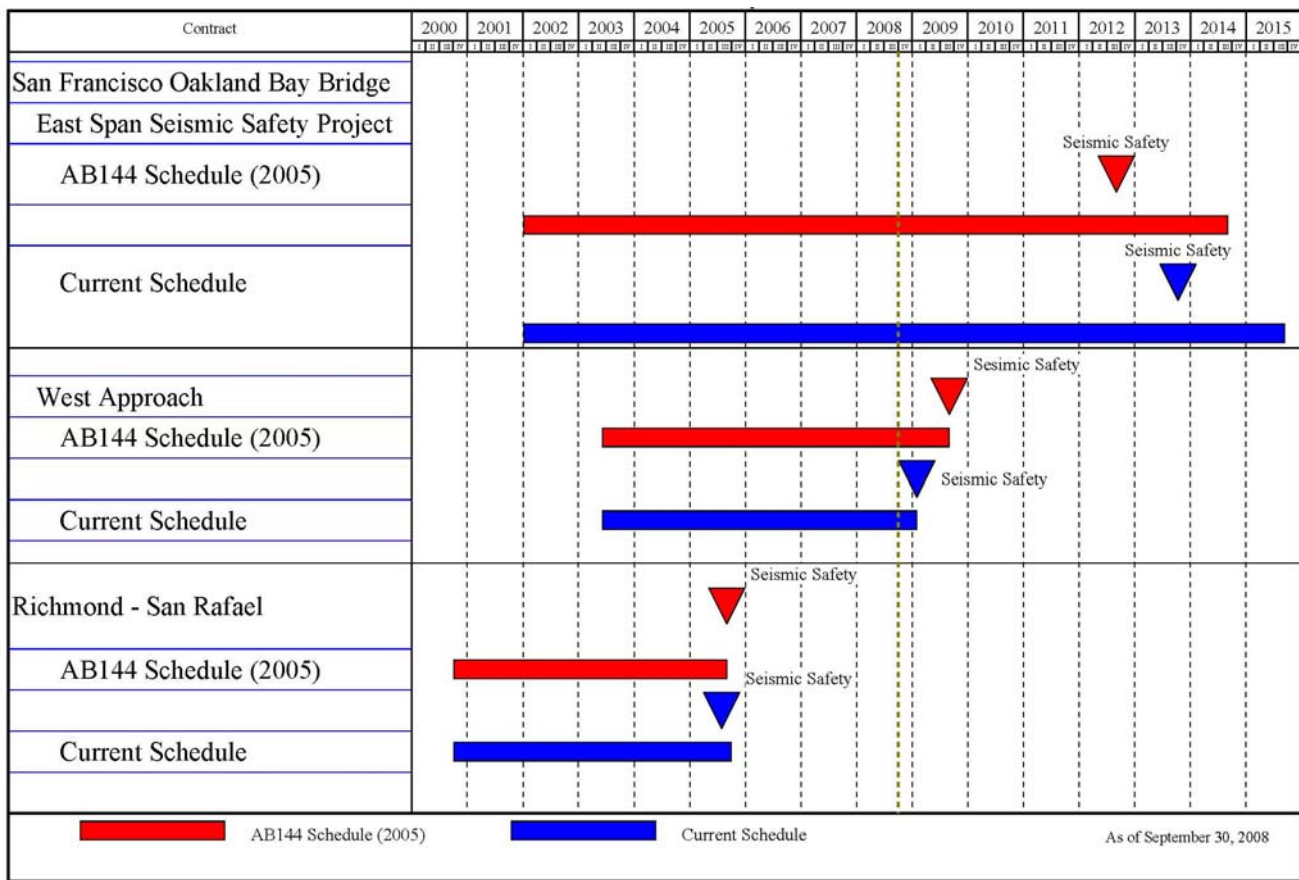
### Baseline and Projected Schedule

Seismic retrofit on six of the seven toll bridges in the TBSRP is complete. These structures include the Benicia-Martinez, Carquinez, Richmond-San Rafael, San Mateo-Hayward, Vincent Thomas and San Diego-Coronado bridges. Seismic retrofiting of the SFOBB west span was completed in June 2004. The SFOBB West Approach and East Span Seismic Replacement projects are currently under construction. The West Approach Project is forecast to be completed in January 2009. The new East Span is

forecast to open in the westbound direction in September 2012 and in the eastbound direction in September 2013.

It is estimated that all construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015, marked by the planned demolition of the existing SFOBB East Span. *Chart 1-Schedule of Remaining Projects* shows the Baseline AB 144/SB 66 project schedule versus the projected completion schedules for the TBSRP projects currently under construction.

**Chart 1-Schedule of Remaining Projects**



## Program Funding and Financing

AB 144 established a funding level of \$8.685 billion for the TBSRP. The bill specifies program funding sources, as shown in *Table 5-Program Budget*.

**Table 5-Program Budget  
as of September, 2008 (\$ Millions)**

<b>Program Budget</b>		<b>Funding Available &amp; Budgeted Contributions</b>
<b>Financing</b>		
Seismic Surcharge Revenue AB 1171	\$2,282	2,282.00
Seismic Surcharge Revenue AB 144	\$2,150	2,150.00
BATA Consolidation	\$820	820.00
<b>Subtotal - Financing</b>	<b>\$5,252</b>	<b>5,252.00</b>
<b>Contributions</b>		
Proposition 192	\$790	789.00
San Diego Coronado Toll Bridge Revenue Fund	\$33	33.00
Vincent Thomas Bridge	\$15	6.90
State Highway Account <sup>(1)(2)</sup>	\$745	745.00
Public Transportation Account <sup>(1)(3)</sup>	\$130	130.00
ITIP/SHOPP/Federal Contingency	\$448	0.00
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	\$642	642.00
SHA - East Span Demolition	\$300	
SHA - "Efficiency Savings" <sup>(4)</sup>	\$130	10.00
Redirect Spillover	\$125	125.00
Motor Vehicle Account	\$75	75.00
<b>Subtotal - Contributions</b>	<b>\$3,433</b>	<b>2,555.90</b>
<b>Total Funding</b>	<b>\$8,685</b>	<b>7,807.90</b>
<b>Encumbered to Date</b>		<b>6,900.13</b>
<b>Remaining Unencumbered</b>		<b>907.77</b>
<p><sup>(1)</sup> The California Transportation Commission adopted a new schedule and changed the PTA/SHA split</p> <p><sup>(2)</sup> To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.</p> <p><sup>(3)</sup> To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.</p> <p><sup>(4)</sup> To date, \$10 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" identified under AB 144. Approximately \$120 million remains to be distributed as scheduled by the CTC.</p> <p><b>Notes:</b> Program budget includes \$900 million program contingency.</p>		

## Funding Status

The program's financial status of revenues and expenditures is summarized in the table below, *Table 6-Toll Bridge Seismic Retrofit Program Financial Status*. The figures include the surcharge revenues collected, transfers from the SHA and the PTA, and expenditures from the Toll Bridge Seismic Retrofit Account (TBSRA) and the Seismic Retrofit Bond Act of 1996 (Proposition 192).

**Table 6-Toll Bridge Seismic Retrofit Program Financial Status as of  
September 30, 2008 (\$ Millions)**

<b>Revenues:</b>	
Toll Surcharge <sup>(1)</sup>	\$687.90
SMIF Interest	\$97.94
Revenue	\$789.00
Bond Revenue (Toll Revenue Bonds)	\$1,062.00
Commercial Paper <sup>(2)</sup>	\$80.00
SANDAG	\$33.00
Vincent Thomas <sup>(3)</sup>	\$6.90
Federal Highway Bridge Replacement and Rehabilitation	\$600.00
<b>Transfers to TBSRA:</b>	
Motor Vehicle Account	\$75.00
State Highway Account <sup>(4)</sup>	\$745.00
Public	\$130.00
Highway	\$10.00
Total Revenues and Transfers	<b>\$4,316.74</b>
<b>Expenditures:</b>	
Capital Outlay	\$4,201.51
State Operations	\$1,127.40
Total Expenditures	<b>\$5,328.91</b>
<b>Encumbrances:</b>	
Capital Outlay	\$1,557.51
State Operations	\$13.71
Total Encumbrances	<b>\$1,571.22</b>
<b>Total Expenditures and Encumbrances</b>	<b>\$6,900.13</b>
<p>(1) The Toll Surcharge is dedicated to repayment of bonds beginning September 1, 2003. Toll Surcharge shown here is only toll revenue collected prior to that date.</p> <p>(2) \$80 Million in Commercial Paper issued on or about April 5, 2005.</p> <p>(3) No additional funding is expected from the Vincent Thomas Toll Revenue Account.</p> <p>(4) To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.</p> <p>(5) To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.</p> <p>(6) To date, \$10 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" identified under AB 144. Approximately \$120 million remains to be distributed as scheduled by the CTC.</p>	



## Program Financing

As discussed on the previous page, AB 144 consolidated the administration of all toll revenues collected on the state-owned Bay Area toll bridges and financing of the TBSRP under the jurisdiction of BATA. BATA has direct programmatic responsibilities for the administration of all toll revenues collected on the state-owned bridges in the Bay Area and responsibilities for financial management of the TBSRP program, including:

- administrative responsibility for collection and accounting of all toll revenues
- authorization to increase tolls on the state-owned bridges by \$1.00, effective January 1, 2007
- project level toll-setting authority as necessary to cover additional cost increases beyond the funded program contingency in order to complete the TBSRP
- assumption of funding all of the roadway and bridge structure maintenance from Caltrans once bridge seismic retrofit projects are completed

In accordance with its responsibilities provided under the law, in September 2005 BATA adopted a finance plan for the TBSRP. The major components of the finance plan include:

- issuing \$6.2 billion in debt, including defeasance of \$1.5 billion in outstanding State Infrastructure Bank (I-Bank) bonds and commercial paper
- increasing tolls on the state-owned bridges by \$1.00 (from \$3.00 to \$4.00 for two-axle vehicles), effective January 1, 2007
- securing the maximum amount of state funding early in the construction schedule to most efficiently use toll funds (see the following discussion concerning the California Transportation Commission (CTC) funding schedule)
- locking in current interest rates to the extent possible in order to improve the likelihood that the entire toll program construction and the operations and maintenance can be delivered within the \$4.00 auto toll level.

In March 2006, BATA approved the issuance of \$1.2 billion in bonds to defease the I-Bank bonds

approved in October 2005. Additionally, pursuant to the law, BATA held two public hearings - one in October and one in November 2005 - to receive public testimony regarding the proposed \$1.00 seismic surcharge toll increase that began on January 1, 2007 on the state-owned toll bridges in the Bay Area. BATA approved the toll increase on January 25, 2006.

Pursuant to AB 144, on September 29, 2005, the CTC adopted a schedule, revised in December 2005, for the transfer of state funds to BATA to fund the TBSRP. The schedule contains the timing and sources of the state contributions, which began in Fiscal Year (FY) 2005-06, and distributes the contributions over the years of project construction to ensure a timely balance between state sources and the contributions from toll funds. In December 2005, the CTC re-adopted the schedule to reflect opportunities maximizing the use of available PTA funds and correct prior transfer transactions. The CTC's December 2005 revised schedule for the transfer of funds allows BATA to pledge the state fund contribution to the financing of the TBSRP per BATA's adopted finance plan. The CTC schedule is included in Appendix C.

In June 2008, BATA refunded \$500 million of the Series 2006 XL Capital auction rate bonds and variable rate demand notes. In July 2008, BATA was requested to approve the refunding of \$715 million in Ambac-insured bonds. The bonds were reissued as uninsured fixed rate bonds. The BATA total debt portfolio is approximately \$5.2 billion.



*The Bay Bridge Toll Plaza*



*The West Approach*

## Project Status

### Ongoing Construction Projects

#### SFOBB West Approach

The SFOBB West Approach Seismic Retrofit Project will remove and replace the west approach to the SFOBB, which includes all of the westbound mainline and most of the eastbound mainline from 4<sup>th</sup> Street to the SFOBB west anchorage, and all of the connecting entrances and exit ramps in downtown San Francisco. Upon completion of the retrofit project, the west approach mainline and ramps will have the same number of traffic lanes as before, but with improved highway geometrics. The mainline eastbound and westbound structures will be adjacent to each other at 4<sup>th</sup> Street and transition to a double-deck configuration with their own independent support system from Rincon Hill to the anchorage in order to tie into the existing SFOBB.

#### Milestones Achieved

The San Francisco-Oakland Bay Bridge (SFOBB) West Approach Project is 95 percent complete as of September 2, 2008 and is forecast for early completion in January 2009. The

westbound traffic was shifted to the south on August 27, 2008 to allow for the start of the demolition of the temporary westbound upper deck widening. Major ongoing work during this quarter includes the continuation of the seismic retrofit work on frame 8L (lower deck anchorage spans).

Job walks with the City of San Francisco (Department of Parking and Traffic (DPT) and Department of Public Works (DPW) to close out items that involve the City's concurrence is ongoing and change orders are being developed to resolve any issues with the City. Punchlist activities for the Fremont off-ramp area are ongoing. The permanent Sterling on-ramp is scheduled to open before the 2008 Thanksgiving holiday and the Harrison off-ramp will be open to traffic in mid-December.

### Project Funding

The TBPOC has forecast \$470.7 million and budgeted \$453.7 million to complete the West Approach Project. The higher forecast covers potential costs associated with achieving early project completion, minimizing impacts to the public and remaining construction risk. Savings from the sale of excess project right-of-way upon completion may reduce the forecast project costs.

The forecast cost of the project remains within the overall TBSRP program contingency capacity and will result in no change to the overall program budget. (See *Table 7- Current West Approach Project Budget and Forecast*).

**Table 7-Current West Approach Project Budget and Forecast (\$ Millions)**

	Current Approved Budget	3rd Quarter 2008 Forecast	Difference
COS	120.0	120.0	-
CO	333.7	350.7	17
Total	453.7	470.7	17

## **SFOBB East Span Seismic Replacement**

The east span of the San Francisco-Oakland Bay Bridge (SFOBB) will be seismically retrofitted through the complete replacement of the existing span. The project is split into four distinct elements; the Oakland Touchdown Approach Structures (OTD), Skyway Structures, Self-Anchored Suspension Span (SAS), and Yerba Buena Island Transition Structures (YBITS).

To facilitate construction flow and acceleration of work off the critical path for project completion, the OTD, SAS, and YBITS elements have been split into multiple contracts.

Including contracts for the interim retrofit and final demolition of the existing east span, the SFOBB East Span Seismic Safety Project now consists of 21 contracts.

Twelve contracts are **complete**:

- Interim Retrofit (Existing Bridge)
- East Span Retrofit (Existing Bridge)
- Pile Installation Demonstration
- OTD Geofill
- YBI Archaeology
- United States Coast Guard (USCG) Road Relocation on YBI
- SAS Land Foundations (W2)
- YBI Electrical Substation
- OTD Submarine Cable
- Skyway
- SAS Marine Foundations (E2/T1)
- Stormwater Treatment Measure

Three contracts are under **construction**:

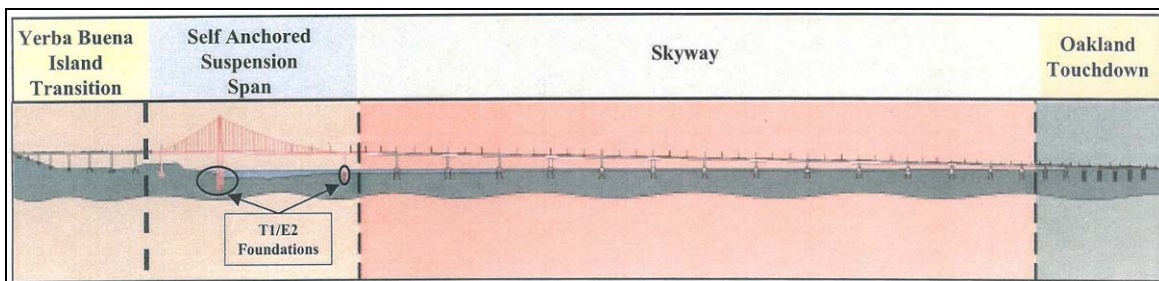
- YBID
- SAS Superstructure
- OTD #1

Six contracts are in **design**:

- YBITS #1: The contract has been advertised
- YBITS #2: (design 80 percent complete to date)
- YBITS #3 landscaping contract
- OTD #2 contract: The contract is planned to be advertised in summer 2010
- OTD portions of the corridor electrical contract: This scope may be executed as a separate contract, or alternatively, may be included within the OTD #2 contract and/or the other contracts within the east span corridor. A 35 percent PS&E package will be ready for review by late 2008, at which point an informed decision can be made on whether to include the corridor electrical work into the OTD contract, or to have it as a separate contract.
- Existing Bridge Demolition design (10 percent complete to date)

The forecast completion date as compared to the AB 144/SB 66 baseline completion date for each of the major components of the SFOBB East Span Seismic Replacement project is shown in *Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary* below.

The approved east span opening date has been extended by 12 months by the TBPOC through an



*SFOBB East Span Replacement Project*



addendum issued on the SAS contract based on bidder inquiries received during advertisement. The current approved schedule does not include the potential for schedule reduction based on an early completion incentive on the SAS contract of six months that was also included in the addendum.

Similarly, the schedule for the YBID contract was extended to take into account the 12-month change to the SAS contract schedule and the incorporation of additional work scope from the YBITS contract. This extension is not expected to affect the new east span open-to-traffic date



SFOBB East Span Replacement Project

**Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary**

Contract	AB 144/SB 66 Baseline Pro	Approved Changes	Current Approved Schedule	3rd Quarter 2008 Forecast Project Completion Date	Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(3)	March 2008	January 2008	(2)
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-
Oakland Touchdown (OTD)	December 2013	12	December 2014	December 2014	-
OTD Submarine Cable	n/a		January 2008	January 2008	-
OTD No. 1 (Westbound)	n/a		January 2010	January 2010	-
OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	December 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-

*Note: The new east span forecast to be fully open to traffic in September 2013. Construction activities will continue beyond that date to complete the project, including demolition of the existing structure.*

## Milestones Achieved – East Span Contracts

### Skyway Contract

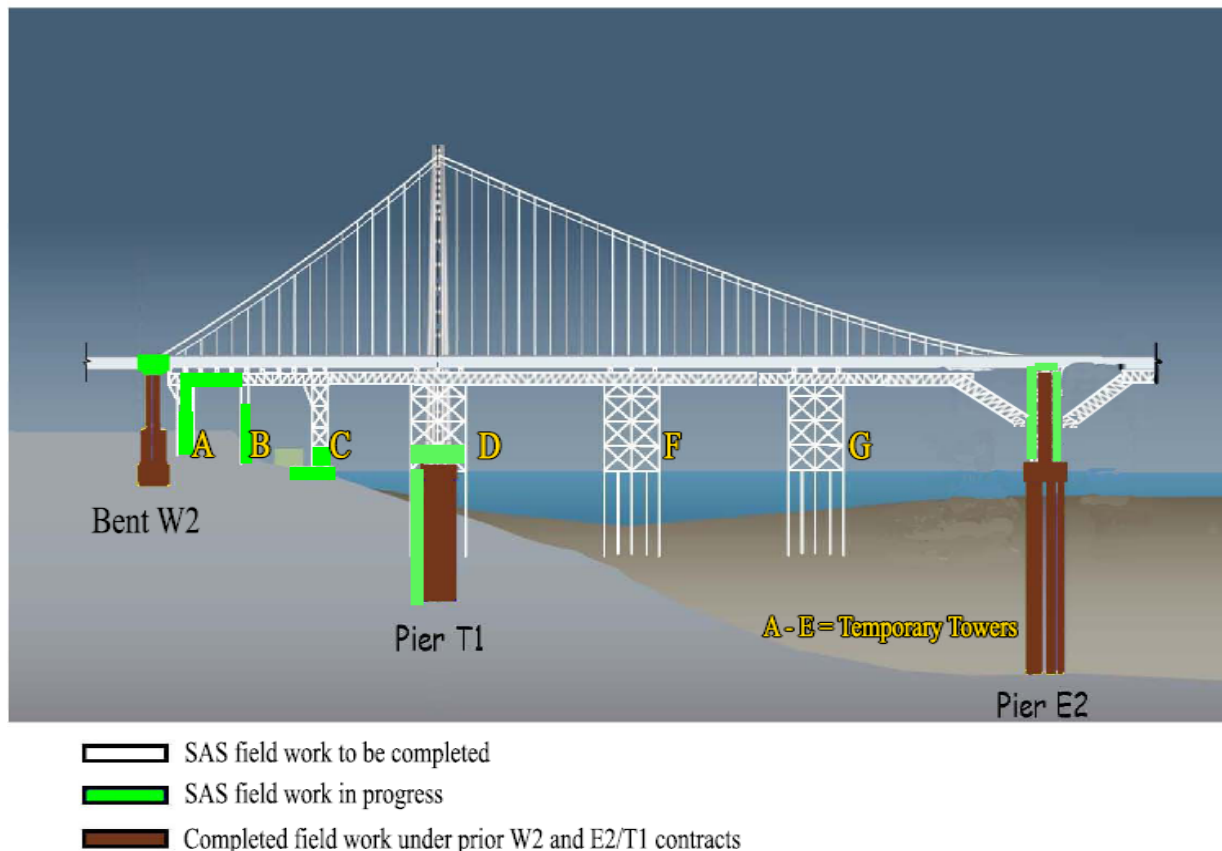
- The Skyway Contract constructed a pair of 1.3-mile long pre-cast segmental concrete bridges that will each carry five lanes of traffic with shoulders. The eastbound structure (to the south) also features a pedestrian/bike path. Substantially completed by the end of 2007, Caltrans accepted the contract on March 24, 2008 upon completion of final punchlist items. The TBPOC has revised the contract budget to close out at \$38.9 million in project savings at a final budget of \$1,254.1 million.

### Self-Anchored Suspension Bridge Contracts

- The Self-Anchored Suspension span is being constructed under three separate contracts. The foundations to the span were constructed by the W2 Land and E2/T1 Marine contracts. Both contracts are now complete. The SAS span, which features a single 525-foot steel tower supporting two parallel steel roadway decks over the shipping channel, is being constructed under a single contract by American Bridge/Fluor (ABF).
- The SFOBB East Span Seismic Replacement Project SAS Superstructure contract is 33 percent complete based on payments to the contractor as of September 2008.

ABF is focused on completing the W2 Cap Beam and E2 Crossbeam and constructing the temporary tower supports for the SAS superstructure. Temporary tower support

## SAS Superstructure Construction Progress





SAS – Tower Leg

foundation piles and falsework erection continues on the Yerba Buena Island. Fabrication of the hinge K pipe beam is ongoing at Oregon Iron Works.

Various portions of the bridge are under fabrication around the world. Zhenhua Port Machinery Company (ZPMC), of Shanghai, China, has been subcontracted to supply and

fabricate all the major steel elements of the SAS. Caltrans has set up facilities and has organized resources in China that will ensure an effective owner's presence in the steel fabrication shops operated by ZPMC. ZPMC is also fabricating and erecting the shearleg crane for the custom barge. Japan Steel Works is fabricating the tower and deviation saddles that will hold the main cable in place.

- All foundations for the SAS were completed in January 2008 with the acceptance of the E2/T1 SAS Marine Foundation contract. The E2/T1 contract completed the main tower foundation at T1 and the foundations and columns at the first pier east of main tower at E2. The TBPOC has revised the contract budget to close out at \$32.6 million in project savings that can be returned to the program.



SAS - Deck Panel Fabrication

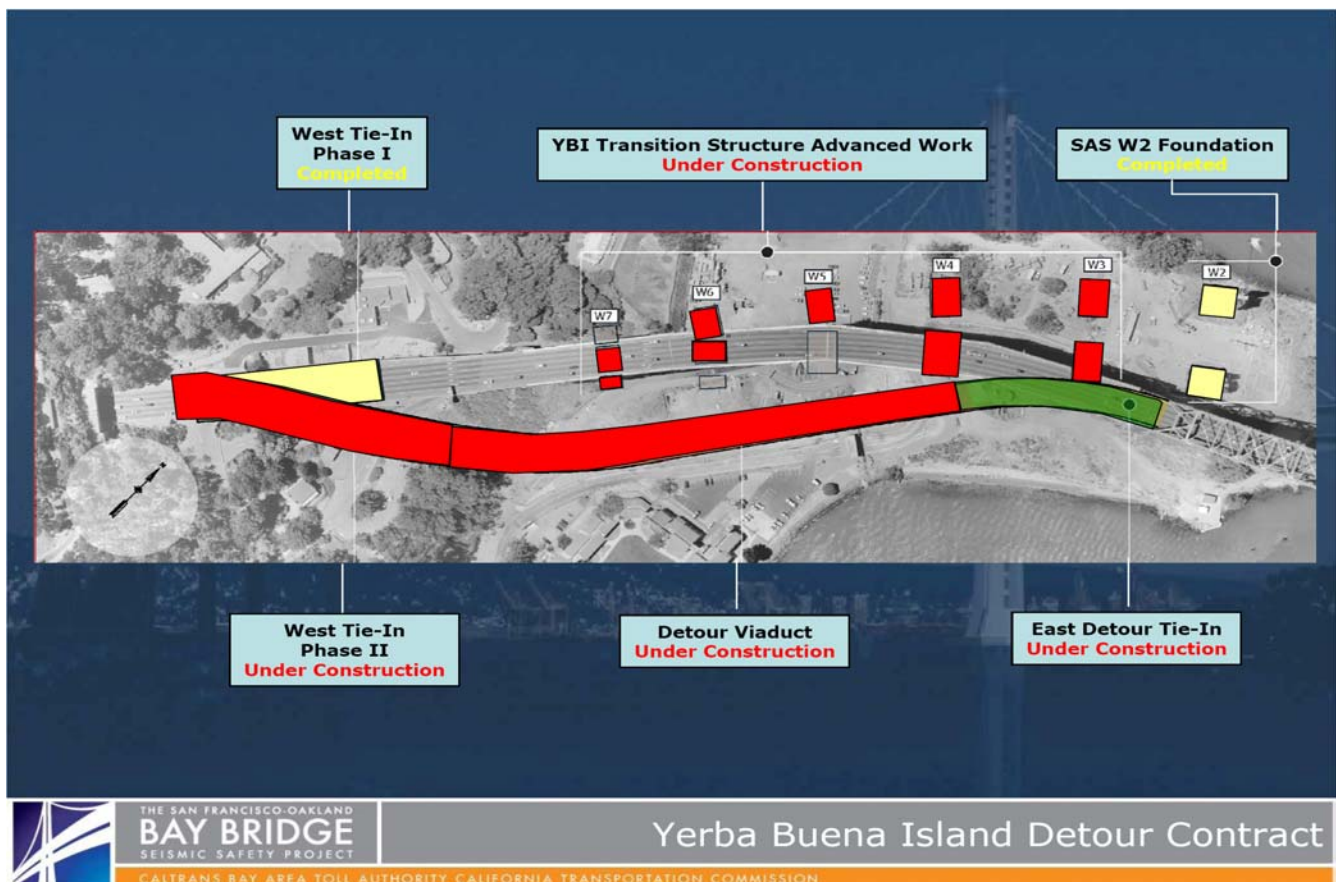


## Yerba Buena Island Contracts

- The Yerba Buena Island contract involves constructing a temporary detour from the tunnel to the existing east span to be followed by the construction of new transition approach structures from the SAS to the YBI tunnel. The work is being constructed under four separate contracts: YBI Detour (YBID), YBI Transition Structures (YBITS) #1 **Mainline Structures**, YBITS #2 **Post Traffic Switch**, and YBITS #3, **Landscaping**.
- The YBID contract was awarded in early 2004 to CC Myers to construct a temporary detour structure providing for, at that time, the SAS to open in 2006. Due to the re-advertisement of the SAS superstructure contract in 2005, the bridge opening was rescheduled to 2013, which necessitated a temporary suspension of the YBI Detour contract and significant design changes. The required suspension of work and design revisions have resulted in increased costs for the YBID contract.

In 2006, the TBPOC approved a plan to pace work on the project, to have Caltrans assume design responsibility over the east and west tie-ins, and to make changes to the detour structures to allow it to stand in place alone for a longer duration than originally intended. The YBID contract is now forecast to be completed in 2010 consistent with the planned westbound opening date of 2012 for the new bridge.

In addition to the revised contract completion date, the TBPOC approved to advance some foundation and retrofit work from the YBITS contracts to the YBID contract on February 15, 2007. Advancing the work will reduce overall project schedule risk by taking work off the critical path for the East Span project, while making more effective use of the extended YBID contract duration, and will enable potential acceleration of the SAS construction pending negotiation with the contractor, ABF.



As part of the YBI advanced work, the W3, W4 and W6 L & R foundations and columns are in various stages of construction. Fabrication of the temporary viaduct detour structural steel has been completed in Pohang, Korea, and all components have arrived in the Bay Area. Viaduct bent caps construction is complete, and steel erection and viaduct roadway is ongoing.

The contractor, CC Myers, has completed the relocation of the existing pump station and is currently constructing the skid bent foundations for the East Tie-In support.

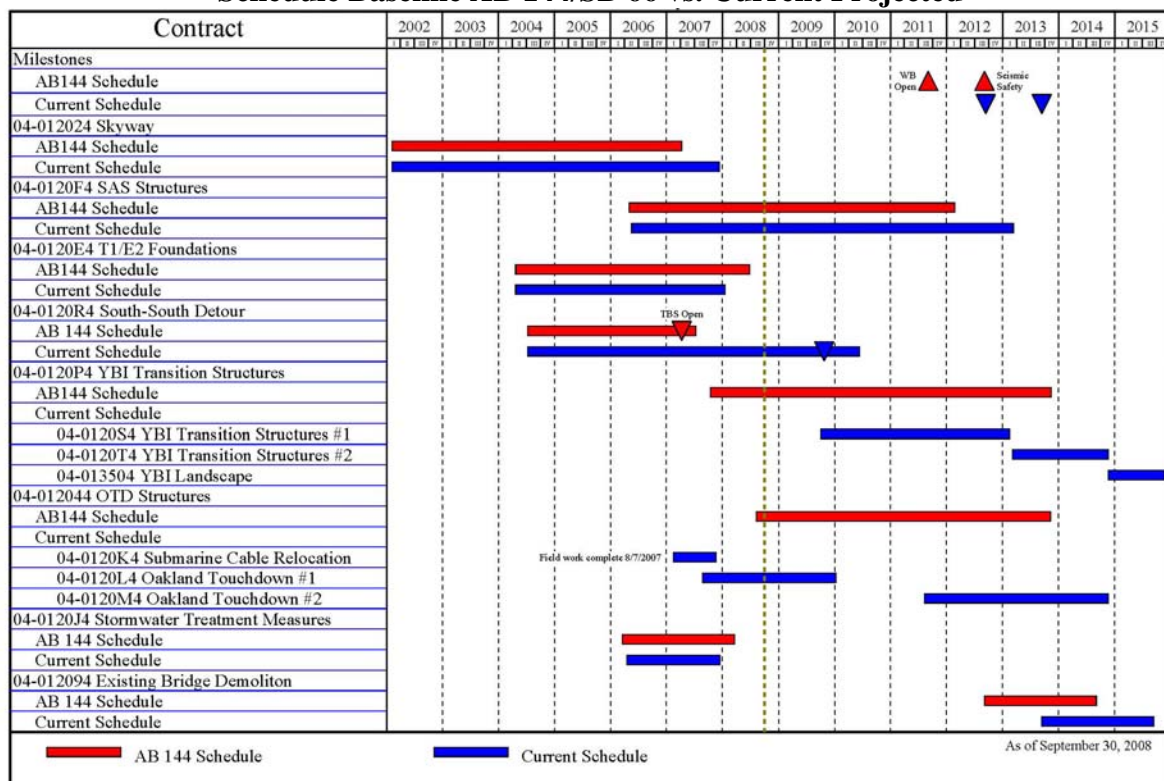


Aerial Photo of SAS W2 Cap Beam and YBID Viaduct

Significant construction risks have been identified that required additional funds to be budgeted for the project. In June 2008, the TBPOC approved a revised project budget of \$442.2 million for the project that is \$107.8 million higher than the previously approved budget. The revised forecast for the project is \$461.2, which includes additional

contingencies to cover the potential project risks. The budget change will be funded from the TBSRP program contingency and redirected project savings from the E2/T1, Skyway, Richmond-San Rafael Bridge contracts.

**Chart 2-San Francisco-Oakland Bay Bridge East Span Corridor  
Schedule Baseline AB 144/SB 66 vs. Current Projected**







YBI – ETI – Columns 52A North and South

- The YBITS #1 contract will construct the approach structures necessary to connect the new SAS to the existing YBI tunnel. To minimize schedule and construction risk, the TBPOC approved the option to accelerate portions of YBITS #1 work by shifting critical foundation work to the YBID contractor. The remaining YBITS #1 contract was advertised in August 2008.
- The YBITS #2 contract includes demolition of the YBID temporary structure, completion of the new eastbound on-ramp, completion of the bike path section on YBI and reconstruction of local and affected facilities at YBI. The majority of the design work is complete. Preparation of detailed plans and quantity calculations is in progress.
- The YBITS #3 contract is for landscaping, and includes slope restoration, vegetation restoration and plant maintenance for the areas affected by YBI construction. A planting concept and preliminary plans have been developed for a majority of the area.

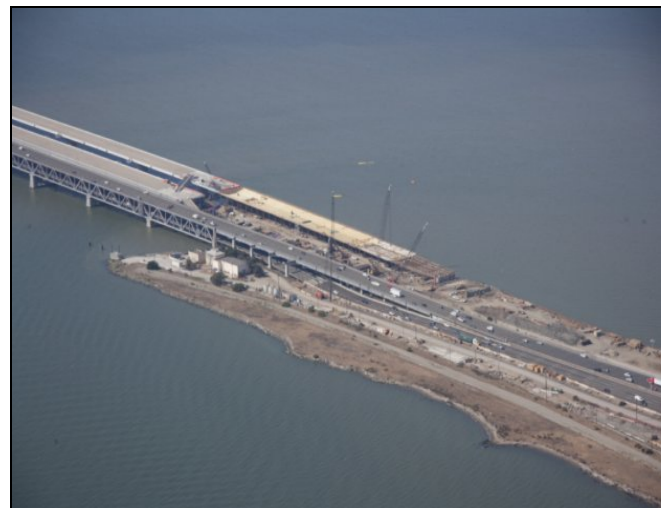
## Oakland Touchdown Contracts

- The Oakland Touchdown (OTD) contracts will construct the twin approach structures from just west of the metering lights at the toll plaza to the Skyway. The work is being constructed under two separate contracts – OTD #1 and OTD #2.

The OTD #1 will construct the complete northern westbound approach structure and most of the substructure to the southern eastbound approach structure. The completion of the eastbound structure will not occur until the westbound traffic is switched to the SAS in 2012 due to the existing structure overlapping the new eastbound alignment. The eastbound structure will be completed as part of the OTD #2 contract.

- Caltrans awarded the OTD #1 contract to MCM Construction on July 17, 2007. The work started on the contract on August 22, 2007. Overall construction is scheduled to be completed by November 2009.

The project is approximately 57 percent complete based on expended value of the contract as of September 20, 2008. The temporary trestle used for construction of the westbound portion of the bridge is substantially complete, while the temporary trestle for the



Oakland Touchdown

eastbound portion of the bridge is still under construction. Work on the superstructure of the westbound bridge structure and the substructure work at the eastbound bridge are ongoing.

The detailed progress status of the project can be viewed on the OTD #1 progress diagram on page 38, Appendix F.

- The OTD #2 contract involves constructing the remaining eastbound bridge section from the new Skyway to the roadway west of the Oakland Toll Plaza. This work will occur once the westbound traffic is shifted onto the new SAS. Design work for the structures portion of the OTD #2 contract is substantially complete. Design work on the roadway portion is ongoing.

### Other Major Ongoing Contracts

- Design of the Existing Bridge Demolition contract is 10 percent complete. Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension.

**Table 9-SFOBB East Span Replacement Cost Summary (\$ Millions)**

Contract	AB 144/SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (09/2008)	3rd Quarter 2008 Forecast	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	959.3	-	959.3	646.6	977.1	17.8
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-
SAS E2/T1 Foundations	313.5	(32.6)	280.9	274.5	280.9	-
SAS Superstructure	1,753.7	-	1,753.7	528.9	1,912.5	158.8
YBI Detour	132.0	310.2	442.2	233.2	461.2	19.0
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
* YBITS 1				-	214.3	
* YBITS 2				-	58.5	
* YBITS 3 - Landscape				-	3.3	
Oakland Touchdown	283.8	-	283.8	123.0	302.5	18.7
* OTD Submarine Cable				7.9	9.6	
* OTD Westbound				115.2	226.5	
* OTD Eastbound				-	62.0	
* OTD Electrical Systems				-	4.4	
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	16.6	18.3	-
East Span Completed Projects	90.3	-	90.3	89.2	90.3	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	39.3	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
<b>TOTAL</b>	<b>5,486.6</b>	<b>215.5</b>	<b>5,702.1</b>	<b>3,188.5</b>	<b>5,875.1</b>	<b>173.0</b>

Note: Details may not sum to totals due to rounding effects.

## Project Funding

The AB 144/SB 66 baseline budget for the SFOBB East Span is \$5.487 billion. The current approved budget for SFOBB East Span is \$5.875.1 billion. See *Table 9-SFOBB East Span Replacement Cost Summary*.

The TBPOC reevaluates project and contract cost forecasts on a continual basis. The current third quarter 2008 forecast of \$5.875.1 billion for the project, based upon the fourth quarter 2007 risk management effort, includes the following revisions:

- A budgeted \$38.9 million decrease for the Skyway contract from project savings after contract closeout.
- A budgeted \$32.6 million decrease for the SAS E2/T1 Foundations contract from project savings after contract closeout.
- A budgeted \$310.2 million and a forecasted \$19 million increase for the YBID contract for construction risks and contingencies identified for the contract based on the fourth quarter 2007 risk management effort. These risks are focused on higher construction costs to tie in the detour viaduct to the existing east spans and schedule risks.
- A forecast increase in the cost of Capital Outlay Support (COS) to \$17.8 million, as a result of a detailed staffing and consultant contract cost forecast review.
- A forecast \$13.7 million increase for the SAS superstructure contract to cover actions taken to encourage additional bidders for the project, including the bidders' stipend for the lowest three responsive bidders.
- A forecast \$158.8 million increase for the SAS superstructure contract to cover delay risks and other challenges as identified in the second quarter 2008 risk management effort. The contractor has reported that the steel

roadway segments are four to five months behind their schedule.

While the contractor and Caltrans are working to develop opportunities for acceleration to mitigate this delay, the second quarter 2008 risk management effort is accounting for the risk in the project forecast.

- A forecast \$17.2 million decrease for the Bridge Demolition Contract due to a reevaluation of the cost escalation rates for the project.
- All of the variances discussed above can be funded from a combination of other budgeted capital and Toll Bridge Seismic Retrofit Program Contingency.

## Project Schedule

The current schedule calls for achieving seismic safety and opening the SFOBB new east span to traffic in 2013. The 12 months of schedule extension from the AB144 baseline schedule was granted by addenda to the SFOBB East Span Seismic Replacement Project SAS contract based on bidder inquiries received during advertisements.

While the 12-month schedule extension for the SAS has also extended the schedules for YBITS and OTD contracts accordingly, the TBPOC is scheduling the contracts to accommodate the possibility of opening the SAS earlier than currently forecast.

It is estimated that all of the construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015.

The comparison of the AB 144/SB 66 baseline schedule and the current projected schedule is shown in *Chart 2-SFOBB East Span Corridor Schedule Baseline AB 144/SB 66 vs. Current Projected* on page 18. It should be noted that the schedules shown in *Chart 2* do not at this time account for the potential risks that may affect the schedule identified in the SFOBB East Span Seismic Retrofit Project **Risk Register**.



## Major Risk Issues

### SFOBB East Span Project Replacement Risk Management Plan

Caltrans continues to implement comprehensive risk management on all SFOBB East Span Seismic Replacement Project contracts in accordance with AB 144. Currently, Caltrans BATA, and CTC have embarked on an initiative to manage risk jointly.

Risk response efforts continue to focus on encouraging responsive bids for future contracts and mitigating the estimated cost/schedule impact of identified risks. (See “Risk Management Program” on page 25 for more information.)



*Aerial Photo of SFOBB Looking towards Oakland*



*Aerial Photo of SAS W2 Cap Beam and the YBID Viaduct*

## Quarterly Environmental Compliance Highlights

Overall environmental compliance for the SFOBB East Span project has been a success. All weekly, monthly and annual compliance reports to resource agencies have been delivered on time. There are no comments from receiving agencies. The tasks for the current quarters are focused on mitigation monitoring. Key successes in this quarter are as follows:

- Bird monitoring was conducted weekly in the active construction areas.
- Turbidity monitoring was conducted without incident during pier construction at Oakland Touchdown and also during Temporary Tower C construction for the Self-Anchored Suspension Superstructure contract.
- Buoys identifying Environmentally Sensitive Areas (ESA's) were inspected and repaired as needed.
- Marine mammal, hydro-acoustic and bird predation monitoring were conducted at Temporary Tower D, for the SAS contract.
- Fish monitoring was conducted during the installation of the silt curtains and the placement of fill at Temporary Tower C for the SAS contract. Seventy-four fish were removed from the area encompassed by the silt curtains. Fish monitoring continued during the installation of the silt curtains and the fill placement at Temporary Tower C.
- A plant monitoring survey was conducted in the Emeryville Crescent Marsh.
- Bay Conservation and Development Commission Permit Amendment Request No. 22 was submitted. A request for concurrence of the proposed construction of

a crane runway platform on Yerba Buena Island for the YBI Detour contract has been made to the National Oceanic and Atmospheric Administration (NOAA) Fisheries.

## Accomplishments

- On August 21<sup>st</sup>, environmental staff discovered and reported the presence of an emaciated female sea lion at the Oakland Touchdown. The sea lion was transported to the Marine Mammal Center in Sausalito and subsequently rehabilitated. The sea lion was successfully nursed back to health, which made it possible for her release on September 16<sup>th</sup>, at the Point Reyes National Seashore.
- On September 16<sup>th</sup>, Caltrans hosted an interagency meeting with the San Francisco Bay Conservation and Development Commission, the Regional Water Quality Control Board, NOAA Fisheries and the California Department of Fish and Game. The meeting provided an opportunity for agency staff to communicate their concerns and recommendations. It is anticipated that the outcome of these meetings will result in improved channels of communication and the fostering of cooperation and trust between Caltrans and the agencies.



*Turbidity Curtain and Water Quality Monitoring Boats*

## Completed Projects

Seismic retrofits and project closeout have been completed on the Richmond-San Rafael, Benicia-Martinez, Carquinez, San Mateo-Hayward, Vincent Thomas, San Diego-Coronado toll bridges and on the west span of the SFOBB. (See Table 10-Cost Comparison AB 144/SB 66, **Third Quarter** 2008 Forecast and Expenditures through September 2008 for Completed Projects below.)

The TBPOC is forecasting additional project savings on the Richmond-San Rafael Bridge Seismic Retrofit Project with the completion of the public access project and resolution of final negotiations with regulatory agencies regarding the cost of pile driving mitigation and impact to fisheries. An additional \$8.5 million in project savings can be returned to the program, for a total project savings of \$97.5 million.



The San Diego Coronado Bridge Rendering with Uplights

**Table 10-Cost Comparison AB 144/SB 66, **Third Quarter** 2008 Forecast and Expenditures through **September 30**, 2008 for Completed Projects (\$ Millions)**

Project	AB 144/ SB 66 Budget	Approved Changes	Current Approved	Cost To Date (09/2008)	3rd Quarter Forecast	Variance
a	b	c	d = b + c	e	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	302.0	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Richmond-San Rafael Bridge Retrofit Project	914.0	(97.5)	816.5	794.8	816.5	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
<b>TOTAL</b>	<b>1,839.4</b>	<b>(97.5)</b>	<b>1,741.9</b>	<b>1,713.2</b>	<b>1,741.9</b>	<b>-</b>

*Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined. Although seismic retrofit of the Richmond-San Rafael and San Diego-Coronado bridges are complete, environmental mitigation/monitoring work is ongoing.*



## Risk Management Program

*To be updated*

The following is a summary of risk management developments during the **third quarter** of 2008.

### **Corridor Schedule Opportunity and Risk Response**

Risk identification, updating, and mitigation activities are ongoing on all contracts in the project. The following six risk areas have been identified as critical to the corridor schedule:

- Self-Anchored Suspension (SAS) Tower and Deck Fabrication
- SAS Cable Installation
- SAS Barge Crane Procurement and Delivery
- Corridor Electrical/Mechanical Systems Integration
- SAS Tower Erection
- SAS Hinge Closure Construction

A focus team is assigned to each risk area and provides updates on risk response strategies. This is incorporated into the risk registers on an ongoing basis.

### **Updates to Risk Registers**

The Skyway contract was accepted on March 24, 2008 with no claims outstanding and significant savings in both Capital Outlay (CO) and Capital Outlay Support (COS).

During the quarter, the SAS contract risk manager conducted a workshop in China with all the key members of Team China. The Team China risk workshop evaluated all of the developments in the fabrication process and updated the risk registers accordingly.



SAS – Shearleg Crane Barge Left Coast Lifter

Prices of construction materials, energy and commodities have risen significantly in recent months. Moreover, the value of the United States dollar against foreign currency has dropped significantly. Along with significant fuel price escalation, operating cost volatility has also increased. The risk registers were updated to reflect these market conditions and the resulting cost risk adjustments will be reported in upcoming risk management reports.

The Corridor Schedule Team (CST) continues to identify ways to enhance completion dates while providing recommendations to program management on scheduling decisions and mitigating potential schedule risks. The risk registers were updated as to delay risks of each contract and the cross-impact of one contract on another.

The SAS Contractor has stated that the fabrication schedule for the Orthotropic Box Girder (OBG) is four to five months behind schedule. Opportunities for acceleration to mitigate this delay are being developed. If acceleration does not occur, this delay may

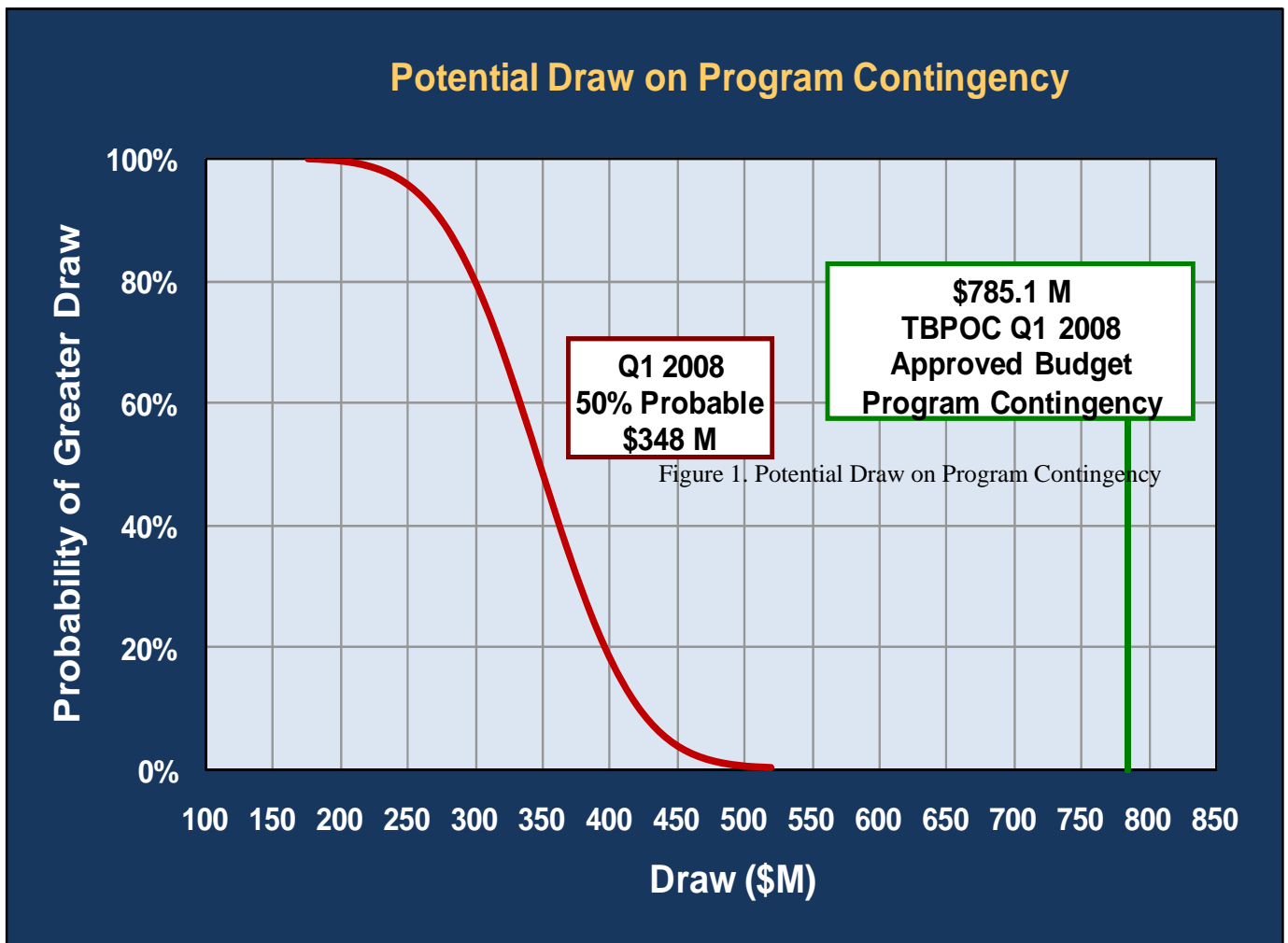
increase and result in additional cross-impacts to the corridor schedule. This issue is being incorporated into the risk register and is likely to result in additional identified risk that will also be reported in upcoming risk management reports.

As of the end of the first quarter 2008, the potential draw on program contingency ranges from about \$175 million to \$520 million, as shown in the diagram below.

### Adequacy of Program Reserves

AB 144 states that Caltrans must “regularly reassess its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes.”

Each contract has a contingency allowance within its budget. The sum of these contingency allowances is compared to the total of CO, COS and program risks. Any excess of the risks over the contingency allowances represents a potential draw on the program contingency (the reserve).



*To be updated*



## Other Toll Bridges

### The Dumbarton Bridge

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west. The route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The annual average daily traffic (AADT) of the route is near 60,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults. The United States Geological Survey (USGS) reports that the San Andreas Fault, some nine miles to the west of the bridge, and the Hayward Fault, some eight miles to the east of the bridge, pose most of the significant seismic threat to the San Francisco Bay Area.

### The Antioch Bridge

State Route 160 crosses the San Joaquin River between the city of Antioch and Sherman Island (leading to Rio Vista) via the Antioch Bridge. The Bridge carries a single lane of traffic in each direction. The AADT for the route is slightly over 10,000 vehicles per day. This bridge is threatened by the Bird's Landing Seismic Zone, Coast Range/Sierra Nevada Boundary Zone and the San Andreas Fault.

### Cost and Schedule

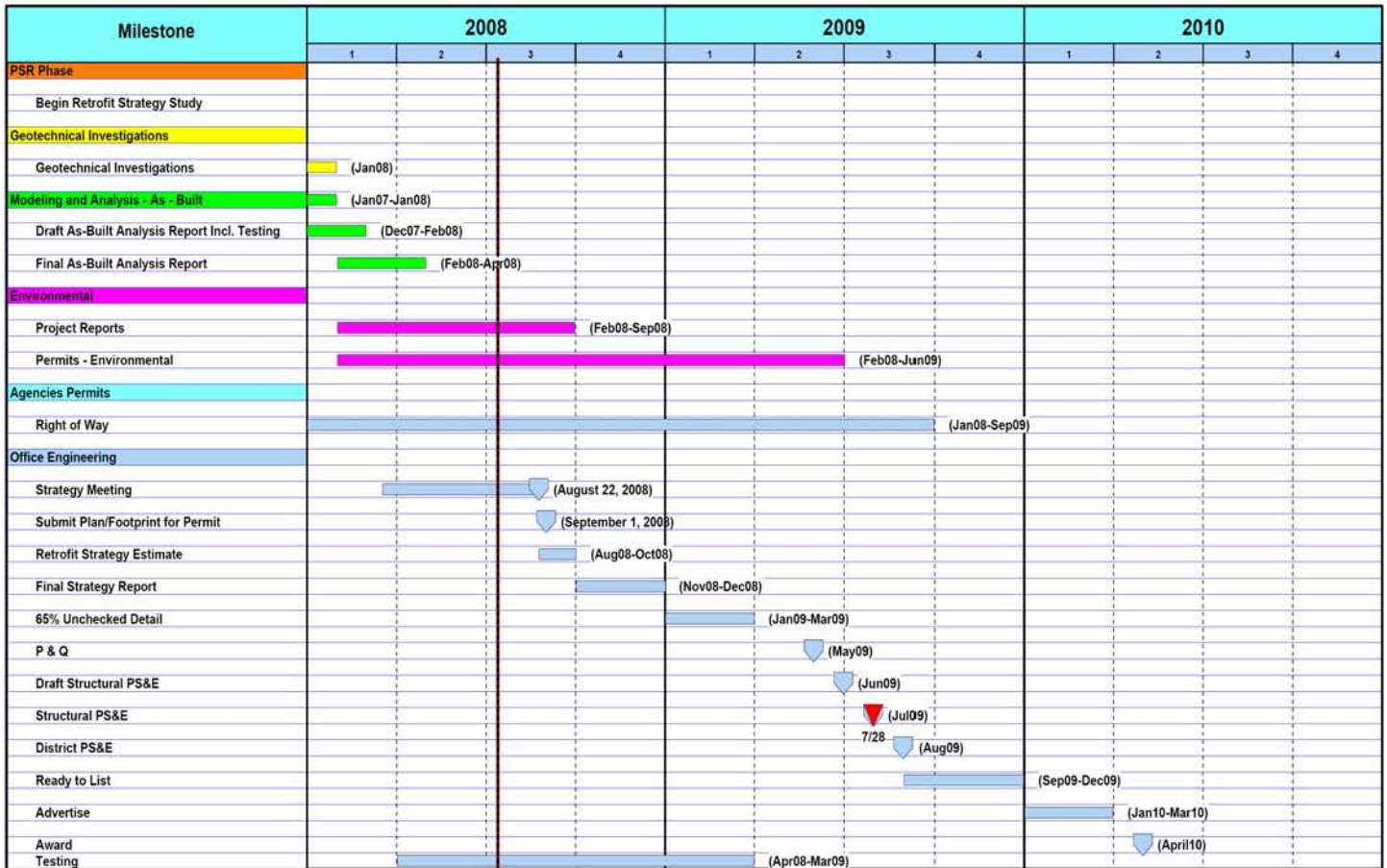
In late 2004, Caltrans initiated limited vulnerability studies of the Antioch Bridge and the Dumbarton Bridge. These studies were completed in May 2005. Based on the vulnerability studies and a follow-up sensitivity analysis, Caltrans and BATA developed a work plan to refine the seismic analysis and to assess the required performance levels of each structure, including new geotechnical analysis. In June 2006, BATA approved \$17.8 million in toll bridge rehabilitation funding to proceed with the comprehensive seismic analysis of the bridges. In September 2006, BATA entered into a consultant contract to conduct geotechnical and geophysical

investigations, which have been ongoing since December 2006. Based on the analysis, Caltrans has determined that the Dumbarton and Antioch bridges require seismic retrofit.

Work in the area of bridge structural engineering continues for both bridges. A strategy meeting took place on August 22, 2008 for both projects and consensus by the project teams recommended retrofit strategies for both bridges. Both the Dumbarton and Antioch Bridge seismic retrofit strategies include installation of isolation bearings and strengthening of the piers above the water line. The Dumbarton Bridge retrofit strategy also includes superstructure and deck modifications and additional strengthening of the over-land approach slab structures. The Antioch Bridge retrofit strategy includes relatively minor modifications to the approach structure on Sherman Island. It was concluded at this meeting that foundation retrofit is not required for either bridge. The design teams presented their proposed strategy schemes and the results of their analysis to the Toll Bridge Seismic Safety Peer Review Panel on September 24, 2008. The design teams are currently preparing draft estimates based on the above retrofit strategies, which are expected to be complete by the first week of October 2008. The design teams met with the regulatory agencies to discuss the scope of work and the schedules, as well as the environmental issues affecting both bridges.

Risk management meetings were held on September 23, 2008 to discuss the risks associated with the retrofit strategy for each bridge. Once the design/retrofit strategy is completed, all the permit applications will be submitted to the appropriate agencies for their approval (see schedule in Chart 3 on following page).

**Chart 3 – Dumbarton and Antioch Bridges  
Summary Schedule**



### Summary of TBPOC Expenses

Pursuant to Streets and Highways Code Section 30952.1 (d), expenses incurred by Caltrans, BATA, and the California Transportation Commission (CTC) for costs directly related to the duties associated with the TBPOC are to be reimbursed by toll revenues. *Table 11-Toll Bridge Program Oversight Committee Actual Expenses: July 1, 2005 through September 30, 2008* shows expenses through September 30, 2008 for TBPOC functioning, support, and monthly and quarterly reporting.

**Table 11-Toll Bridge Program Oversight Committee**

**Estimated Expenses: July 1, 2005 through September 30, 2008 (\$ Millions)**

Agency/Program Activity		Expenses
BATA	To be updated	0.5
Caltrans		1.3
CTC		0.7
Reporting		2.1
<b>Total Program</b>		<b>4.4</b>

## Appendices

- A. TBSRP All Bridges AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through September 30, 2008 (A-1 and A-2).
- B. TBSRP East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through September 30, 2008.
- C. CTC Third Quarter Schedule.
- D. SFOBB West Approach Retrofit Progress Diagram/Mainline Eastbound 80 Rebuilding
- E. SFOBB Seismic Retrofit Project YBITS Progress Diagram
- F. SFOBB Seismic Retrofit Project Oakland Touchdown #1
- G. Project/Contract Photographs and Artist Renderings

## Appendix A-1.

<b>Toll Bridge Seismic Retrofit Program</b> <b>AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through September 30, 2008</b>						
(\$ millions)						
Bridge	AB 144/SB 66 Baseline	TBPOC Current Approved Budget	Second Quarter 2008 Forecast	Third Quarter 2008 Forecast	Variance 3rd Q08 -2nd Q08)	Expenditures Through Sep 2008
<b>Benicia-Martinez</b>						
Capital Outlay Support	38.1	38.1	38.1	38.1	-	38.1
Capital Outlay	139.7	139.7	139.7	139.7	-	139.7
Total	177.8	177.8	177.8	177.8	-	177.8
<b>Carquinez</b>						
Capital Outlay Support	28.7	28.7	28.7	28.7	-	28.8
Capital Outlay	85.5	85.5	85.5	85.5	-	85.4
Total	114.2	114.2	114.2	114.2	-	114.2
<b>San Mateo-Hayward</b>						
Capital Outlay Support	28.1	28.1	28.1	28.1	-	28.1
Capital Outlay	135.4	135.4	135.4	135.4	-	135.3
Total	163.5	163.5	163.5	163.5	-	163.4
<b>Vincent Thomas</b>						
Capital Outlay Support	16.4	16.4	16.4	16.4	-	16.4
Capital Outlay	42.1	42.1	42.1	42.1	-	42.0
Total	58.5	58.5	58.5	58.5	-	58.4
<b>San Diego-Coronado</b>						
Capital Outlay Support	33.5	33.5	33.5	33.5	-	33.2
Capital Outlay	70.0	70.0	70.0	70.0	-	69.4
Total	103.5	103.5	103.5	103.5	-	102.6
<b>Richmond-San Rafael</b>						
Capital Outlay Support	134.0	127.0	127.0	127.0	-	126.7
Capital Outlay	780.0	689.5	689.5	689.5	-	668.1 *
Total	914.0	816.5	816.5	816.5	-	794.8
<b>West Span Retrofit</b>						
Capital Outlay Support	75.0	75.0	75.0	75.0	-	74.8
Capital Outlay	232.9	232.9	232.9	232.9	-	227.2
Total	307.9	307.9	307.9	307.9	-	302.0
<b>West Approach</b>						
Capital Outlay Support	120.0	120.0	120.0	120.0	-	110.0
Capital Outlay	309.0	333.7	350.7	350.7	-	292.5
Total	429.0	453.7	470.7	470.7	-	402.5
<b>SFOBB East Span</b>						
Capital Outlay Support	959.3	959.3	977.1	977.1	-	646.6
Capital Outlay	4,492.2	4,711.0	4,745.2	4,890.3	145.1	2,541.2
Other Budgeted Capital	35.1	31.8	7.7	7.7	-	0.7
Total	5,486.6	5,702.1	5,730.0	5,875.1	145.1	3,188.5
Miscellaneous Program Costs	30.0	30.0	30.0	30.0	-	24.7
Subtotal Capital Outlay Support	1,463.1	1,456.1	1,473.9	1,473.9	-	1,127.4
Subtotal Capital Outlay	6,321.9	6,471.6	6,498.7	6,643.8	145.1	4,201.5
Subtotal Toll Seismic Retrofit	7,785.0	7,927.7	7,972.6	8,117.7	145.1	5,328.9
Program Contingency	900.0	757.3	712.4	567.3	(145.1)	-
<b>Total Toll Seismic Retrofit Program</b>	<b>8,685.0</b>	<b>8,685.0</b>	<b>8,685.0</b>	<b>8,685.0</b>	<b>-</b>	<b>5,328.9</b>

Notes: \* Budget for Richmond-San Rafael Bridge include \$16.9 million of deck joint rehabilitation work that's considered to be eligible for seismic retrofit program funding.  
(Due to the rounding of numbers, the totals above are shown within \$0.1).

## Appendix A-2.

<b>Toll Bridge Seismic Retrofit Program - SAS Alternative</b> <b>AB 144 Baseline Budget, Forecasts and Expenditures Through September 30, 2008</b>					
(\$ in millions)					
Bridge	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of Sep 2008 See Note (1)	Estimated Costs not yet Spent or Encumbered as of Sep 2008	Total Forecast as of Sep 2008 (Columns C +D)
<b>Other Completed Projects</b>					
Capital Outlay Support	144.9	144.9	144.6	0.3	144.9
Capital Outlay	472.6	472.6	472.6	0.1	472.7
Total	617.5	617.5	617.2	0.4	617.6
<b>Richmond-San Rafael</b>					
Capital Outlay Support	134.0	127.0	126.7	0.3	127.0
Capital Outlay	698.0	689.5	674.8	14.7	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	801.5	15.0	816.5
<b>West Span Retrofit</b>					
Capital Outlay Support	75.0	75.0	74.8	0.2	75.0
Capital Outlay	232.9	232.9	232.8	0.1	232.9
Total	307.9	307.9	307.6	0.3	307.9
<b>West Approach</b>					
Capital Outlay Support	120.0	120.0	111.3	8.7	120.0
Capital Outlay	309.0	333.7	324.8	25.9	350.7
Total	429.0	453.7	436.1	34.6	470.7
<b>SFOBB East Span -Skyway</b>					
Capital Outlay Support	197.0	181.0	181.4	(0.4)	181.0
Capital Outlay	1,293.0	1,254.1	1,400.0	(145.9)	1,254.1
Total	1,490.0	1,435.1	1,581.4	(146.3)	1,435.1
<b>SFOBB East Span -SAS- Superstructure</b>					
Capital Outlay Support	214.6	214.6	111.6	103.0	214.6
Capital Outlay	1,753.7	1,753.7	1,649.6	262.9	1,912.5
Total	1,968.3	1,968.3	1,761.2	365.9	2,127.1
<b>SFOBB East Span -SAS- Foundations</b>					
Capital Outlay Support	62.5	41.0	37.6	3.4	41.0
Capital Outlay	339.9	307.3	308.7	(1.4)	307.3
Total	402.4	348.3	346.3	2.0	348.3
<b>Small YBI Projects</b>					
Capital Outlay Support	10.6	10.6	10.2	0.4	10.6
Capital Outlay	15.6	15.6	16.2	(0.5)	15.7
Total	26.2	26.2	26.4	(0.1)	26.3
<b>YBI Detour</b>					
Capital Outlay Support	29.5	66.0	51.9	14.1	66.0
Capital Outlay	131.9	442.2	367.2	94.0	461.2
Total	161.4	508.2	419.1	108.1	527.2
<b>YBI - Transition Structures</b>					
Capital Outlay Support	78.7	78.7	16.4	62.3	78.7
Capital Outlay	299.4	276.1	0.1	276.0	276.1
Total	378.1	354.8	16.5	338.3	354.8
<b>Oakland Touchdown</b>					
Capital Outlay Support	74.4	74.4	45.4	46.7	92.1
Capital Outlay	283.8	283.8	219.1	83.4	302.5
Total	358.2	358.2	264.5	130.1	394.6
<b>East Span Other Small Project</b>					
Capital Outlay Support	212.3	213.3	202.8	10.5	213.3
Capital Outlay	170.8	170.8	93.0	53.6	146.6
Total	383.1	384.1	295.8	64.1	359.9
<b>Existing Bridge Demolition</b>					
Capital Outlay Support	79.7	79.7	0.4	79.3	79.7
Capital Outlay	239.2	239.2	-	222.0	222.0
Total	318.9	318.9	0.4	301.3	301.7
<b>Miscellaneous Program Costs</b>					
Capital Outlay Support	30.0	30.0	26.1	3.9	30.0
<b>Total Capital Outlay Support (2)</b>	<b>1,463.2</b>	<b>1,456.2</b>	<b>1,141.2</b>	<b>332.7</b>	<b>1,473.9</b>
<b>Total Capital Outlay</b>	<b>6,321.8</b>	<b>6,471.5</b>	<b>5,758.9</b>	<b>884.9</b>	<b>6,643.8</b>
<b>Program Total</b>	<b>7,785.0</b>	<b>7,927.7</b>	<b>6,900.1</b>	<b>1,217.6</b>	<b>8,117.7</b>

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

(2). Total Capital Outlay Support includes program indirect costs.

(Due to the rounding of numbers, the totals above are shown within \$0.1).

## Appendix B.

### Toll Bridge Seismic Retrofit Program - SFOBB East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through September 30, 2008

(\$ millions)

East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget See Note (1)	Second Quarter 2008 Forecast	Third Quarter 2008 Forecast	Variance 3rd Q08 - 2nd Q08)	Expenditures Through Sep 2008
<b>SFOBB East Span -Skyway</b>						
Capital Outlay Support	197.0	181.0	181.0	181.0	-	180.8
Capital Outlay	1,293.0	1,254.1	1,254.1	1,254.1	-	1,236.5
Total	1,490.0	1,435.1	1,435.1	1,435.1	-	1,417.3
<b>SFOBB East Span -SAS- E2/T1 Foundations</b>						
Capital Outlay Support	52.5	31.0	31.0	31.0	-	28.3
Capital Outlay	313.5	280.9	280.9	280.9	-	274.5
Total	366.0	311.9	311.9	311.9	-	302.8
<b>SFOBB East Span -SAS- Superstructure</b>						
Capital Outlay Support	214.6	214.6	214.6	214.6	-	105.6
Capital Outlay	1,753.7	1,753.7	1,767.4	1,912.5	145.1	528.9
Total	1,968.3	1,968.3	1,982.0	2,127.1	145.1	634.5
<b>SFOBB East Span -SAS- W2 Foundations</b>						
Capital Outlay Support	10.0	10.0	10.0	10.0	-	9.2
Capital Outlay	26.4	26.4	26.4	26.4	-	25.8
Total	36.4	36.4	36.4	36.4	-	35.0
<b>YBI Detour</b>						
Capital Outlay Support	29.4	66.0	66.0	66.0	-	49.8
Capital Outlay	132.0	442.2	461.2	461.2	-	233.2
Total	161.4	508.2	527.2	527.2	-	283.0
<b>YBI - Transition Structures (Total, including the following split contracts and prior-to-split expenses)</b>						
Capital Outlay Support	78.7	78.7	78.7	78.7	-	21.5
Capital Outlay	299.3	276.1	276.1	276.1	-	-
Total	378.0	354.8	354.8	354.8	-	21.5
<b>YBI- Transition Structures Contract No. 1</b>						
Capital Outlay Support			45.0	45.0		3.4
Capital Outlay			214.3	214.3		-
Total			259.3	259.3		3.4
<b>YBI- Transition Structures Contract No. 2</b>						
Capital Outlay Support			16.0	16.0		1.7
Capital Outlay			58.5	58.5		-
Total			74.5	74.5		1.7
<b>YBI- Transition Structures Contract No. 3 - Landscape</b>						
Capital Outlay Support			1.0	1.0		-
Capital Outlay			3.3	3.3		-
Total			4.3	4.3		-
<b>Oakland Touchdown (Total, including the following split contracts and prior-to-split expenses)</b>						
Capital Outlay Support	74.4	74.4	92.1	92.1	-	43.3
Capital Outlay	283.8	283.8	302.5	302.5	-	123.0
Total	358.2	358.2	394.6	394.6	-	166.3
<b>Oakland Touchdown Contract - Submarine Cable</b>						
Capital Outlay Support	-	-	3.0	3.0	-	0.9
Capital Outlay	-	-	9.6	9.6	-	7.9
Total	-	-	12.6	12.6	-	8.8
<b>Oakland Touchdown Contract No. 1 (Westbound)</b>						
Capital Outlay Support	-	-	49.9	49.9	-	20.7
Capital Outlay	-	-	226.5	226.5	-	115.2
Total	-	-	276.4	276.4	-	135.9
<b>Oakland Touchdown Contract No. 2 (Eastbound)</b>						
Capital Outlay Support	-	-	15.8	15.8	-	1.2
Capital Outlay	-	-	62.0	62.0	-	-
Total	-	-	77.8	77.8	-	1.2
<b>Oakland Touchdown Contract - Electrical Systems</b>						
Capital Outlay Support	-	-	1.4	1.4	-	0.5
Capital Outlay	-	-	4.4	4.4	-	-
Total	-	-	5.8	5.8	-	0.5

## Appendix B. (Cont'd.)

### Toll Bridge Seismic Retrofit Program - SFOBB East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2008

(\$ millions)						
East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget See Note (1)	Second Quarter 2008 Forecast	Third Quarter 2008 Forecast	Variance 3rd Q08 - 2nd Q08)	Expenditures Through Sep 2008
<b>YBI/SAS (Archeology)</b>						
Capital Outlay Support	1.1	1.1	1.1	1.1	-	1.1
Capital Outlay	1.1	1.1	1.1	1.1	-	1.1
Total	2.2	2.2	2.2	2.2	-	2.2
<b>YBI - USCG Rd Relocation</b>						
Capital Outlay Support	3.0	3.0	3.0	3.0	-	2.7
Capital Outlay	3.0	3.0	3.0	3.0	-	2.8
Total	6.0	6.0	6.0	6.0	-	5.5
<b>YBI - Substation and Viaduct</b>						
Capital Outlay Support	6.5	6.5	6.5	6.5	-	6.4
Capital Outlay	11.6	11.6	11.6	11.6	-	11.3
Total	18.1	18.1	18.1	18.1	-	17.7
<b>Oakland Geofill</b>						
Capital Outlay Support	2.5	2.5	2.5	2.5	-	2.5
Capital Outlay	8.2	8.2	8.2	8.2	-	8.2
Total	10.7	10.7	10.7	10.7	-	10.7
<b>Pile Installation Demonstration Project</b>						
Capital Outlay Support	1.8	1.8	1.8	1.8	-	1.8
Capital Outlay	9.2	9.2	9.2	9.2	-	9.2
Total	11.0	11.0	11.0	11.0	-	11.0
<b>Existing Bridge Demolition</b>						
Capital Outlay Support	79.7	79.7	79.7	79.7	-	0.4
Capital Outlay	239.2	239.2	222.0	222.0	-	-
Total	318.9	318.9	301.7	301.7	-	0.4
<b>Stormwater Treatment Measures</b>						
Capital Outlay Support	6.0	8.0	8.0	8.0	-	7.9
Capital Outlay	15.0	18.3	18.3	18.3	-	16.6
Total	21.0	26.3	26.3	26.3	-	24.5
<b>Right-of-way and Environmental Mitigation</b>						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay	72.4	72.4	72.4	72.4	-	39.3
Total	72.4	72.4	72.4	72.4	-	39.3
<b>Sunk Cost - Existing East Span Retrofit</b>						
Capital Outlay Support	39.5	39.5	39.5	39.5	-	39.5
Capital Outlay	30.8	30.8	30.8	30.8	-	30.8
Total	70.3	70.3	70.3	70.3	-	70.3
<b>Environmental Phase (Expended)</b>						
Capital Outlay Support	97.7	97.7	97.7	97.7	-	97.7
<b>Project Expenditures, Pre-splits</b>						
Capital Outlay Support	44.9	44.9	44.9	44.9	-	44.9
<b>Non-project Specific Costs</b>						
Capital Outlay Support	20.0	19.0	19.0	19.0	-	3.2
Subtotal East Span Capital Outlay Support	959.3	959.3	977.1	977.1	-	646.6
Subtotal East Span Capital Outlay and Sunk Costs	4,492.2	4,711.0	4,745.2	4,890.3	145.1	2,541.2
Other Budgeted Capital	35.1	31.8	7.7	7.7	-	0.7
<b>Total SFOBB East Span</b>	<b>5,486.6</b>	<b>5,702.1</b>	<b>5,730.0</b>	<b>5,875.1</b>	<b>145.1</b>	<b>3,188.5</b>

(1) Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority.  
(Due to the rounding of numbers, the totals above are shown within \$0.1).



## Appendix C.

### CTC TBSRP Contributions Adopted December 2005

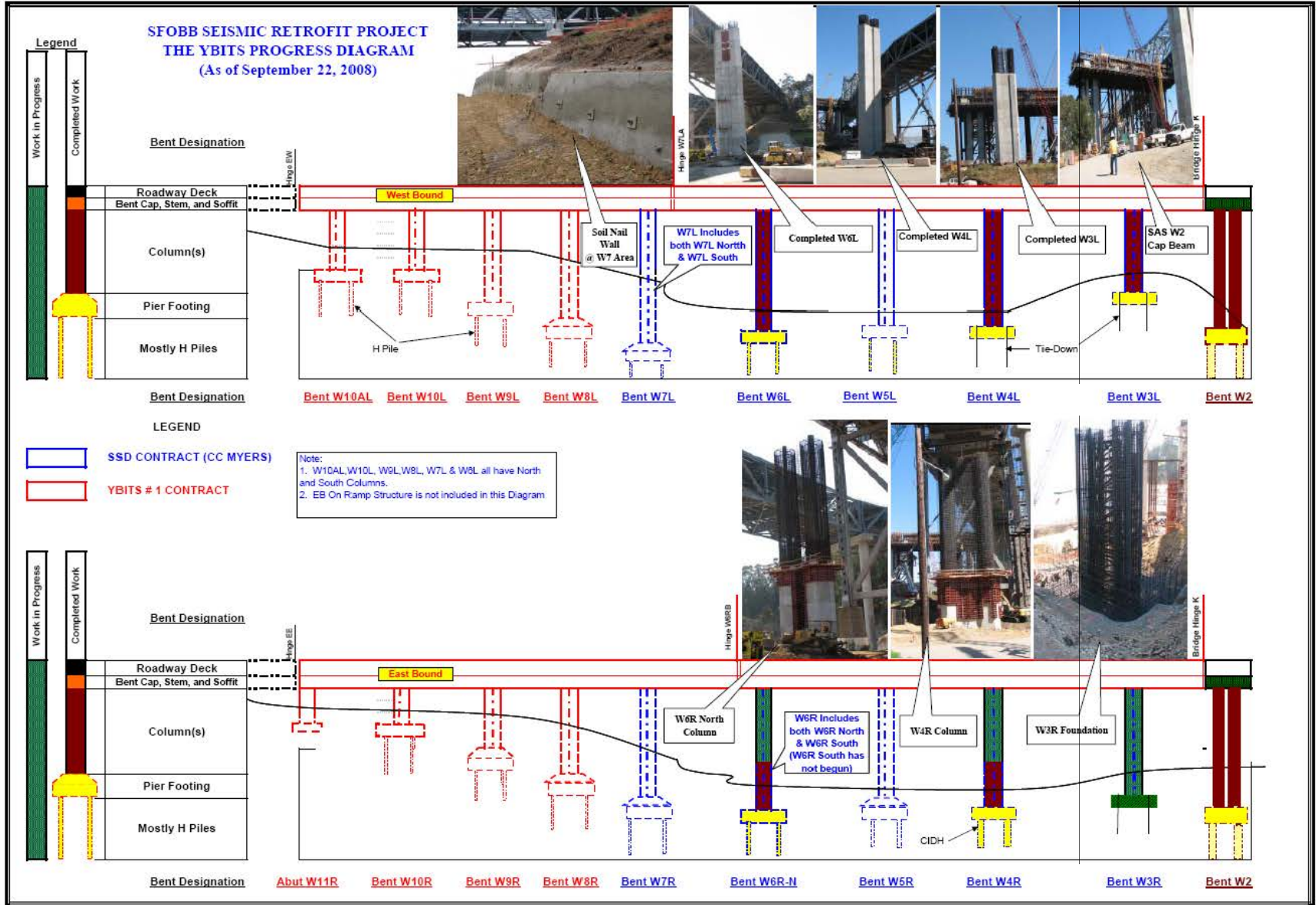
#### Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (\$ Millions)

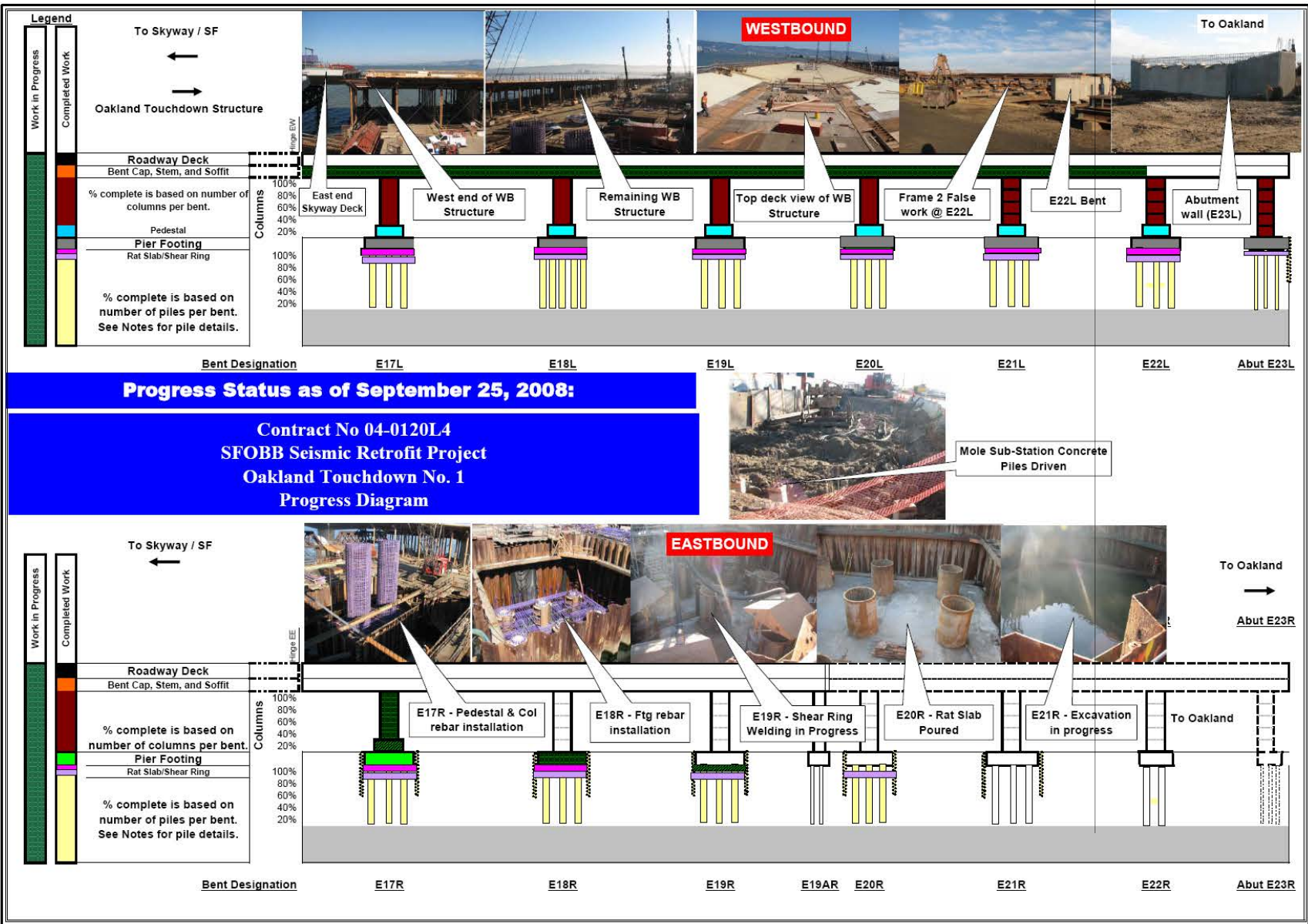
Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08 (Actual)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
AB 1171	SHA	290									290
	PTA	80	40								120
	Highway Bridge Replacement and Rehabilitation (HBRR)	100	100	100	42						342
	Contingency				1	99	100	100	148		448
AB 144	SHA*	2	8				53	50	17		130
	Motor Vehicle Account (MVA)	75									75
	Spillover		125								125
	SHA**									300	300
	<b>Total</b>	547	273	100	43	99	153	150	165	300	1830

\* Caltrans Efficiency Savings

\*\* SFOBB East Span Demolition Cost









**Appendix G.**  
**Project/Contract Photographs**  
**SFOBB East Span Replacement Project**



*East Span Overview*

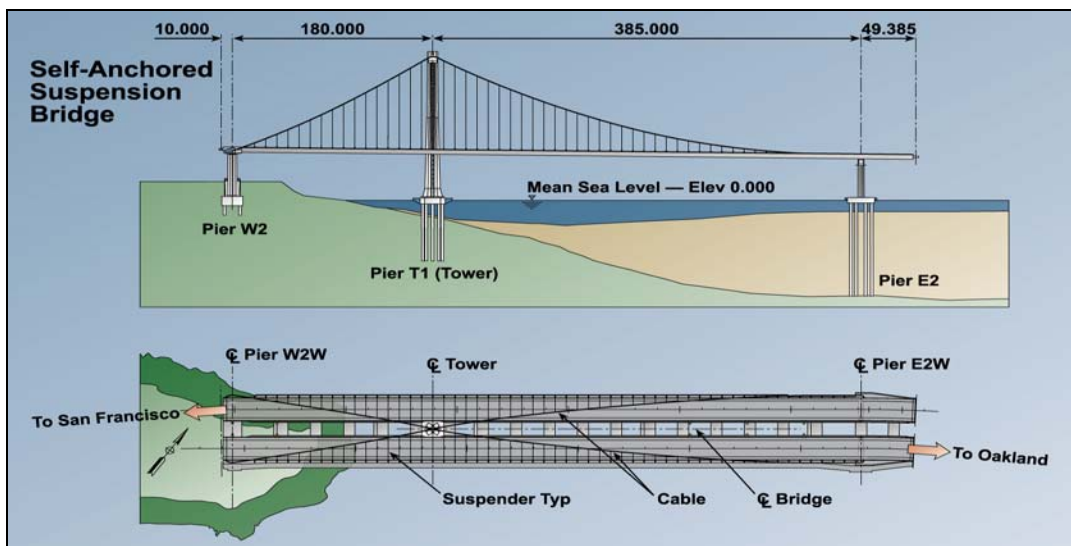


*YBI Advanced Work Columns W3, W4 & W6L*

## SAS Superstructure Contract



*SAS Superstructure Artist Rendition*





## SAS Contract Photographs from Changxing Island, China SAS Superstructure Contract



*SAS - Deck Panel at the Zhenhua Port Machinery Company in China*



*SAS - Box Girder Cross Section at the Zhenhua Port Machinery Company in China*



## SAS Superstructure Contract (Cont'd.)



OBG (Orthopedic Box Girder) and Temporary Work



Shearleg Barge Crane Boom



Temporary Trestle



SAS Deck Panel Fabrication



Tower Leg



Shearleg Crane Barge



## SAS E2/T1 Foundations Contract (Cont'd.)

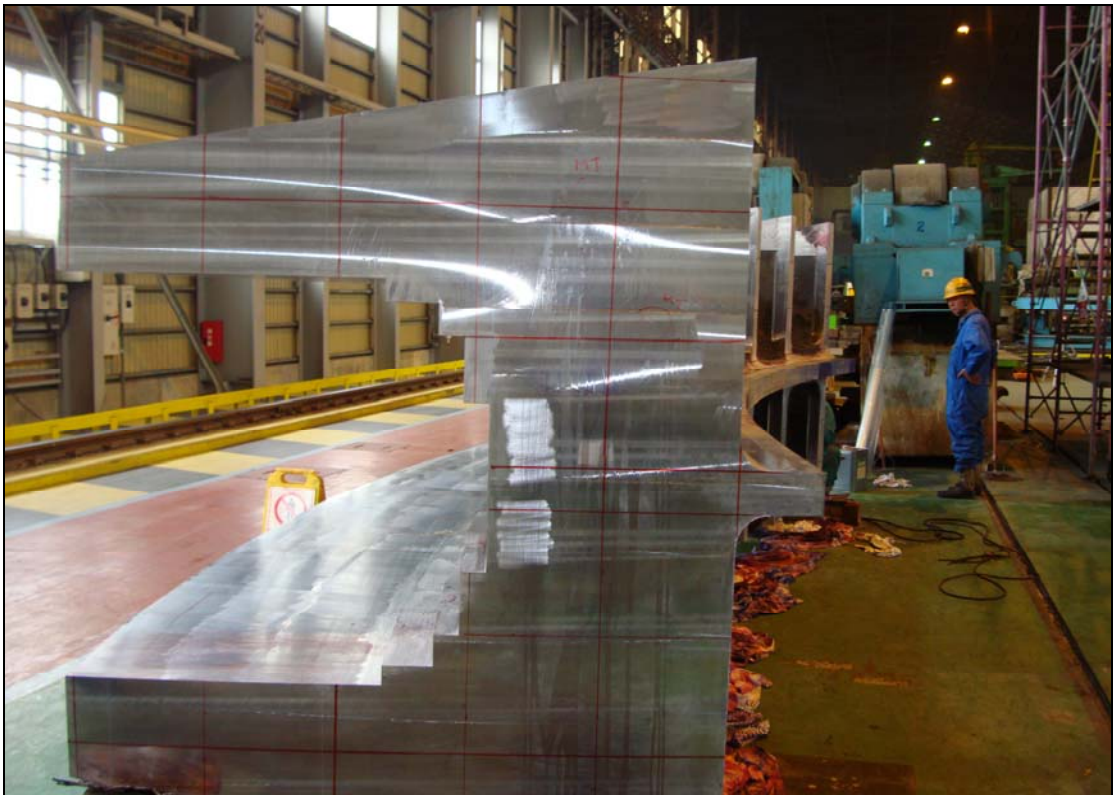


*T1 = Foundation for the 530-foot steel tower  
E2 = Eastern Support of the suspension roadway  
W2 = Western Support of the suspension roadway*



*SAS – E2 Crossbeam Temporary Work*

SAS E2/T1 Foundations, Muroran, Japan



W2/E3 during Ultrasonic Testing



W2/E3 during Ultrasonic Testing



## SAS E2/T1 Foundations, Muroran, Japan (cont.)



*W2/w3 Milling*





## YBID Advanced Work



*YBI Advanced Work*



## Artist Renderings of Completed East Span







## **ITEM 4: PROGRESS REPORTS**

- b. Draft October 2008 Monthly Progress Report

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Andrew Fremier, Deputy Executive Director, BATA

**RE:** Agenda No. - 4b  
Progress Reports  
Item- Draft October 2008 Monthly Progress Report

---

**Recommendation:**

**APPROVAL** Confirmation / For Information Only

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

The PMT approved the final September 2008 Monthly Progress Report through delegated TBPOC authority on October 1, 2008, and requests TBPOC confirmation of this approval.

Included in this packet is a draft October 2008 Monthly Progress Report, for your information. TBPOC approval of this report, through PMT delegation, is anticipated as soon as updated expenditure data and final comments are incorporated.

**Attachment(s):**

Draft October 2008 Monthly Progress Report



# Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

## Monthly Progress Report October 2008

Version 4.0



TOLL BRIDGE PROGRAM  
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Released: November 2008





# Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

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Monthly Progress Report  
October 2008

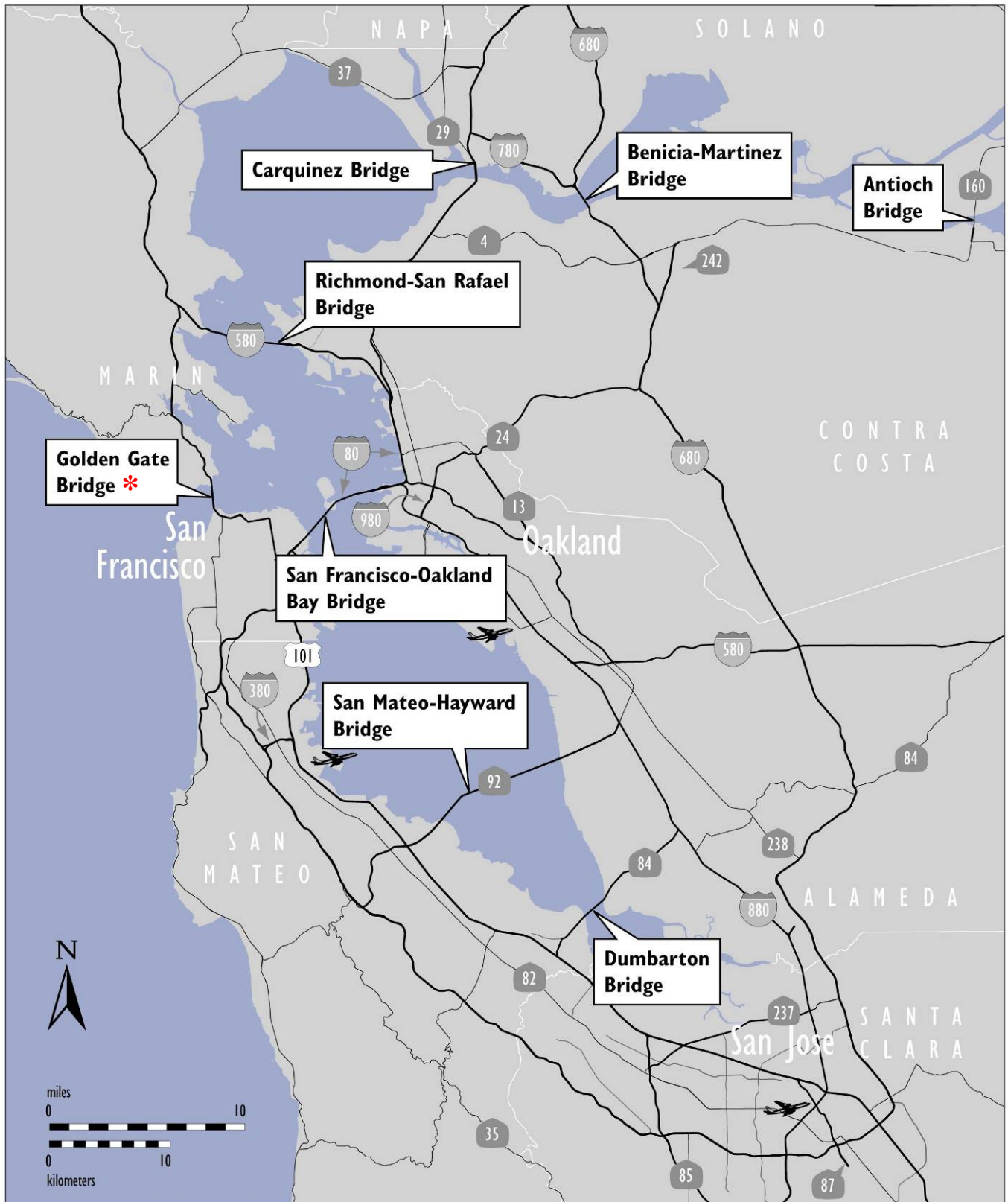




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## Toll Bridges of the San Francisco Bay Area



\* Under the jurisdiction of the Golden Gate Bridge, Highway and Transportation District

## INTRODUCTION

In July 2005, Assembly Bill 144, (AB 144) Hancock created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the state Toll Bridge Seismic Retrofit Program projects and the Benicia-Martinez Bridge project. The TBPOC comprises the Director of the California Department of Transportation (Caltrans), the Executive Director of the Bay Area Toll Authority (BATA) and the Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Eastbound Carquinez Bridge Seismic Retrofit	Complete
New Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

RM1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction
Old Benicia-Martinez Bridge Reconstruction	Construction
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

This report focuses on identifying critical project issues and monitoring project cost and schedule performance for the projects as measured against approved budgets and schedule milestones. This report is intended to fulfill Caltrans' requirement to provide monthly project progress reporting to the TBPOC under Section 30952.05 of the Streets and Highway Code.

## EXECUTIVE SUMMARY

## Toll Bridge Seismic Retrofit Program—Cost (\$ Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/20/05)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
<b>SFOBB East Span Replacement Project</b>								
Capital Outlay Support		959.3	-	959.3	646.6	977.1	17.8	●
Capital Outlay Construction								
Skyway	Complete	1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-	●
SAS E2/T1 Foundations	Complete	313.5	(32.6)	280.9	274.5	280.9	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	528.9	1,912.5	158.8	●
YBI Detour	Design/Const	132.0	310.2	442.2	233.2	461.2	19.0	●
YBI Transition Structures		299.3	(23.2)	276.1	-	276.1	-	●
* YBITS Contract No. 1	Design				-	214.3		
* YBITS Contract No. 2	Design				-	58.5		
* YBITS Contract No. 3 - Landscape	Design				-	3.3		
Oakland Touchdown (OTD)		283.8	-	283.8	123.0	302.5	18.7	
* OTD Submarine Cable	Complete				7.9	9.6		●
* OTD No. 1 (Westbound)	Construction				115.2	226.5		●
* OTD No. 2 (Eastbound)	Design				-	62.0		●
* OTD Electrical Systems	Design				-	4.4		●
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	●
Stormwater Treatment Measures	Complete	15.0	3.3	18.3	16.6	18.3	-	●
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	39.3	72.4	-	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	
<b>Total SFOBB East Span Replacement Project</b>		<b>5,486.6</b>	<b>215.5</b>	<b>5,702.1</b>	<b>3,188.5</b>	<b>5,875.1</b>	<b>173.0</b>	
<b>SFOBB West Approach Replacement</b>	Construction							●
Capital Outlay Support		120.0	-	120.0	110.0	120.0	-	
Capital Outlay Construction		309.0	24.7	333.7	292.5	350.7	17.0	●
<b>Total SFOBB West Approach Replacement</b>		<b>429.0</b>	<b>24.7</b>	<b>453.7</b>	<b>402.5</b>	<b>470.7</b>	<b>17.0</b>	
<b>Richmond-San Rafael Bridge Retrofit</b>	Complete							●
Capital Outlay Support		134.0	(7.0)	127.0	126.7	127.0	-	
Capital Outlay Construction & Right-of-Way		780.0	(90.5)	689.5	668.1	689.5	-	
<b>Total Richmond-San Rafael Bridge Retrofit</b>		<b>914.0</b>	<b>(97.5)</b>	<b>816.5</b>	<b>794.8</b>	<b>816.5</b>	<b>-</b>	
<b>Program Completed Projects</b>	Complete							
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	699.0	705.6	-	
<b>Total Program Completed Projects</b>		<b>925.4</b>	<b>-</b>	<b>925.4</b>	<b>918.4</b>	<b>925.4</b>	<b>-</b>	
<b>Miscellaneous Program Costs</b>		<b>30.0</b>	<b>-</b>	<b>30.0</b>	<b>24.7</b>	<b>30.0</b>	<b>-</b>	
<b>Program Contingency</b>		<b>900.0</b>	<b>(142.7)</b>	<b>757.3</b>	<b>-</b>	<b>567.3</b>	<b>(190.0)</b>	
<b>Total Toll Bridge Seismic Retrofit Program</b>		<b>8,685.0</b>	<b>-</b>	<b>8,685.0</b>	<b>5,328.9</b>	<b>8,685.0</b>	<b>-</b>	

- Within Approved Current Schedule and Budget
- Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation
- Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

\*Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available program funds has been made available by the Treasure Island Development Authority.

Notes: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

## Toll Bridge Seismic Retrofit Program—Schedule

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2008)	Project Complete Schedule Forecast (09/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = b + c	e	f = e - d	g	h
<b>SFOBB East Span Replacement Project</b>							
Skyway	Apr 07	8	Dec 07	Dec 07	-	●	See page 10.
SAS E2/T1 Foundations	Jun 08	(3)	Mar 08	Jan 08	(2)	●	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	●	See discussion on page 12.
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	●	See discussion on pages 16.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	●	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	●	See Note.
• OTD Submarine Cable	n/a		Jan 08	Jan 08	-	●	
• OTD Westbound	n/a		Jan 10	Jan 10	-	●	
• OTD Eastbound	n/a		Nov 14	Nov 14	-	●	
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	●	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	●	
◆ Open to Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	●	See Note.
◆ Open to Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	●	See Note.
<b>SFOBB West Approach Replacement</b>	Aug 09	-	Aug 09	Jan 09	(7)	●	
◆ Open to Traffic Date: Mainline Realignment	n/a	-	Apr 08	Apr 08	-	●	Opened to traffic April 12, 2008
<b>Richmond-San Rafael Bridge</b>							
• Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	●	Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005. \$89 million has been transferred to Program Contingency.
• Public Access Project	n/a	-	May 07	Sept 07	4	●	See page 33.

*Note: Schedules for selected projects and the Open to Traffic dates were extended by 12 months from the AB144/SB66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract.*

## Regional Measure 1 Program—Cost (\$ Millions)

Project	Work Status	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
<b>New Benicia-Martinez Bridge Project</b>	Construction							●
Capital Outlay Support		157.1	35.2	192.3	183.5	192.3	-	
Capital Outlay Construction		861.6	173.5	1,035.1	971.8	1,035.1	-	
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	16.9	20.3	-	
Project Reserve		20.8	4.0	24.8	-	24.8	-	
<b>Total New Benicia-Martinez Bridge Project</b>		<b>1,059.9</b>	<b>212.6</b>	<b>1,272.5</b>	<b>1,172.2</b>	<b>1,272.5</b>	<b>-</b>	
<b>Carquinez Bridge Replacement Project</b>	Complete							●
Capital Outlay Support		124.4	(0.2)	124.2	123.6	123.6	(0.6)	
Capital Outlay Construction		381.2	3.2	384.4	378.8	384.5	0.1	
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-	
Project Reserve		12.1	(3.0)	9.1	-	0.6	(8.5)	
<b>Total Carquinez Bridge Replacement Project</b>		<b>528.2</b>	<b>-</b>	<b>528.2</b>	<b>512.3</b>	<b>519.2</b>	<b>(9.0)</b>	
<b>I-880/SR-92 Interchange Reconstruction</b>	Construction							●
Capital Outlay Support		28.8	26.2	55.0	42.2	55.0	-	
Capital Outlay Construction		94.8	60.2	155.0	37.9	155.0	-	
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.0	16.9	-	
Project Reserve		0.3	17.8	18.1	-	18.1	-	
<b>Total I-880/SR-92 Interchange Reconstruction</b>		<b>133.8</b>	<b>111.2</b>	<b>245.0</b>	<b>91.1</b>	<b>245.0</b>	<b>-</b>	
<b>Program Completed Projects</b>	Complete							
Capital Outlay Support		62.0	(5.0)	57.0	57.5	58.8	1.8	
Capital Outlay Construction		324.4	3.6	328.0	308.0	313.0	(15.0)	
Capital Outlay Right-of-Way		1.7	-	1.7	0.5	0.8	(0.9)	
Project Reserve		2.6	1.4	4.0	-	7.1	3.1	
<b>Total Program Completed Projects</b>		<b>390.7</b>	<b>-</b>	<b>390.7</b>	<b>366.0</b>	<b>379.7</b>	<b>(11.0)</b>	
<b>Total Regional Measure 1 Program</b>		<b>2,112.6</b>	<b>323.8</b>	<b>2,436.4</b>	<b>2,141.6</b>	<b>2,416.4</b>	<b>(20.0)</b>	

- Within Approved Current Schedule and Budget
- Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation
- Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

Notes: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.



## Regional Measure 1 Program—Schedule

Project	BATA Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2008)	Project Complete Schedule Forecast (09/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = b + c	e	f = e - d	g	h
<b>New Benicia-Martinez Bridge Project</b>							
• Existing Bridge & Interchange Modifications	Dec 09	-	Dec 09	Dec 09	-	●	
• Open to Traffic Date	Dec 07	-	Aug 07	Aug 07	-	●	
<b>I-880/SR-92 Interchange Reconstruction</b>							
	Dec 10	-	Jun 11	Jun 11	-	●	Contract was awarded on August 28, 2007 with the approval of the state budget.

## Highlights of Project/Program Activities and TBPOC Actions for October 2008

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### Toll Bridge Seismic Retrofit Program

#### SFOBB East Span Seismic Replacement Project

- ◆ On the Self-Anchored Suspension Span Contract, Caltrans and its contractor are continuing to fabricate the steel tower and roadway segments in China. A forecast \$158.8 million increase for the SAS superstructure contract to cover delay risks and other challenges as identified in the second quarter 2008 risk management effort. The contractor has reported that the steel roadway segments are four to five months behind their schedule. While the contractor and Caltrans are working to develop opportunities for acceleration to mitigate this delay, the second quarter 2008 risk management effort is accounting for the risk in the project forecast. On Yerba Buena Island, work has started on the temporary support structures on which the new bridge will be erected.
- ◆ On the Yerba Buena Island Detour contract, the detour viaduct is being erected south of the existing bridge. The foundations for the west tie-in structure from the detour viaduct to the tunnel are being constructed and the steel truss for the east tie-in structure from the detour viaduct to the existing bridge is being fabricated in Arizona.
- ◆ On the Oakland Touchdown #1 contract, foundations for the westbound structure have been constructed. The superstructure work is now in progress. Foundations are being installed for the eastbound structure.

#### New Benicia-Martinez Bridge Project

- ◆ Southbound traffic is now on the east side of the old Benicia-Martinez Bridge.
- ◆ Work is now proceeding on rehabilitation of the west side of the bridge deck and repair of undulations south of the Marina Vista Boulevard interchange.

#### Interstate 880/State Route 92 Interchange Reconstruction Project

- ◆ Temporary support structures have been erected across Interstate 880 for the eastbound State Route 92 to northbound Interstate 880 fly-over structure. Work is proceeding on constructing the fly-over with the first super structure concrete pour on October 15<sup>th</sup>.



(6.1) I-880/SR 92 First Concrete Pour



## PROJECT / CONTRACT REPORTS

### Toll Bridge Seismic Retrofit Program

#### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

- Skyway Contract
- Self-Anchored Suspension (SAS) E2/T1 Foundations Contract
- Self-Anchored Suspension (SAS) Superstructure Contract
- Yerba Buena Island (YBI)

#### Yerba Buena Island (YBI) Detour Contract

#### Yerba Buena Island (YBI) Transition Structure Contracts

- Oakland Touchdown (OTD)

#### Oakland Touchdown (OTD) Submarine Cable Relocation Contract

#### Oakland Touchdown (OTD) #1 Contract

#### Oakland Touchdown (OTD) #2 Contract

- Other Major Contracts
- Other Contracts and Related Project Work

#### San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

#### Other Completed Seismic Retrofit Projects

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

**Project Description:** The East Span will be seismically retrofitted through the complete replacement of the existing span. The remaining effort for this project consists of the following contracts: SAS Superstructure—construction of a self-anchored 385-meter main span superstructure incorporating a 160-meter fabricated structural steel tower with a main cable and inclined suspenders that will support steel orthotropic box girder decks; Yerba Buena Island (YBI) Detour—design and construction of a temporary double-deck bypass structure that will detour traffic to the existing SFOBB, while completing the westerly permanent tie-in structure of the new East Span at Yerba Buena Island; YBI Structures—construction of a new structure connecting the western end of the self-anchored suspension to the Yerba Buena Island viaduct, which will be retrofitted; Oakland Touchdown—at the Oakland end of the East Span, construction of two parallel, cast-in-place post-tensioned concrete viaducts, which join the Skyway to the at-grade Oakland approach fill; and Existing Bridge Demolition—demolition of the existing 1936 SFOBB East Span structure after the construction and placement of traffic onto the new East Span.

### SFOBB East Span Replacement Cost Summary (\$ Millions)

Contract	AB 144/ SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	959.3	-	959.3	646.6	977.1	17.8
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-
SAS E2/T1 Foundations	313.5	(32.6)	280.9	274.5	280.9	-
SAS Superstructure	1,753.7	-	1,753.7	528.9	1,912.5	158.8
YBI Detour	132.0	310.2	442.2	233.2	461.2	19.0
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
* YBITS 1				-	214.3	
* YBITS 2				-	58.5	
* YBITS 3 - Landscape				-	3.3	
Oakland Touchdown	283.8	-	283.8	123.0	302.5	18.7
* OTD Submarine Cable				7.9	9.6	
* OTD Westbound				115.2	226.5	
* OTD Eastbound				-	62.0	
* OTD Electrical Systems				-	4.4	
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	16.6	18.3	-
East Span Completed Projects	90.3	-	90.3	89.2	90.3	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	39.3	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
<b>TOTAL</b>	<b>5,486.6</b>	<b>215.5</b>	<b>5,702.1</b>	<b>3,188.5</b>	<b>5,875.1</b>	<b>173.0</b>

## SFOBB East Span Replacement Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(3)	March 2008	January 2008	(2)
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Oakland Touchdown (OTD)	November 2013	12	December 2014	December 2014	-
* OTD Submarine Cable	n/a		January 2008	January 2008	-
* OTD No. 1 (Westbound)	n/a		January 2010	January 2010	-
* OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	November 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-

\*Contract schedules being further assessed due to changes in SAS schedule.

**Project Status:** Construction is complete for the Skyway, SAS E2/T1 Foundations and Stormwater Treatment Measures contracts. Construction is currently ongoing for the YBI Detour, SAS Superstructure, and OTD #1 (westbound) contracts. Contracts in design include the OTD #2 (eastbound), YBITS Contract #2 and the Existing Bridge Demolition contract. Design of each contract is proceeding per its schedule requirements. The YBI Transition Structure (YBITS) Contract #1 has been advertised.

**Project Issues:** All projects except Demolition have a Risk Response Team and a Risk Register incorporating quantitative risk analyses. A Risk Register has also been developed for Capital Outlay Support (COS) costs, as well as a program-level risk register that captures risks common to all project. The development of a quantitative COS risk analysis is ongoing and is trending higher COS costs for the project.

The Risk Response Team for COS is evaluating the program costs and developing response actions to mitigate. Many of the actions have been effective, as evidenced by a reduction of risk impacts on the Skyway and E2/T1 contracts from the previous quarter. The effort to develop and execute risk response actions to mitigate the cost and schedule impacts posed by risk issues continues to be a high priority.

**Recent TBPOC Actions:** See the following contract detail pages for specific TBPOC actions on the East Span contracts.



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► SKYWAY CONTRACT

**Contract Description:** On the SFOBB East Span Replacement Project, the Skyway contract constructed twin pre-cast concrete segmental bridges that will connect the Oakland approach traffic to the new SAS.

#### Skyway Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - Skyway						
Capital Outlay Support	197.0	(16.0)	181.0	180.8	181.0	-
Capital Outlay Construction	1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-
<b>TOTAL</b>	<b>1,490.0</b>	<b>(54.9)</b>	<b>1,435.1</b>	<b>1,417.3</b>	<b>1,435.1</b>	<b>-</b>

*Note: Details may not sum to totals due to rounding effects.*

#### Skyway Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
East Span - Skyway	April 2007	8	December 2007	December 2007	-

#### Contract Status:

- The contract was substantially completed by the end of 2007 and Caltrans accepted the Skyway Contract on March 24, 2008 upon completion of final punchlist items. The TBPOC is forecasting that the \$1,293.0 million Skyway contract will be closed-out with \$38.9 million in project savings that can be returned to the program contingency.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.



(10.1) Aerial Photo of Skyway Looking towards Yerba Buena Island

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► SELF-ANCHORED SUSPENSION (SAS) E2/T1 FOUNDATIONS CONTRACT

**Contract Description:** The Self Anchored Suspension (SAS) Span E2/T1 Foundation contract constructed the main tower foundation at location T1 and the foundations and columns of the first pier east of the main tower at location E2 in San Francisco Bay. The foundations and columns of the first pier west of the main tower located at W2 on Yerba Buena Island were completed under a separate earlier contract.

#### SAS E2/T1 Foundations Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS E2 / T1 Foundations						
Capital Outlay Support	52.5	(21.5)	31.0	28.3	31.0	-
Capital Outlay Construction	313.5	(32.6)	280.9	274.5	280.9	-
<b>TOTAL</b>	<b>366.0</b>	<b>(54.1)</b>	<b>311.9</b>	<b>302.8</b>	<b>311.9</b>	<b>-</b>

*Note: Details may not sum to totals due to rounding effects.*

#### SAS E2/T1 Foundations Schedule Summary

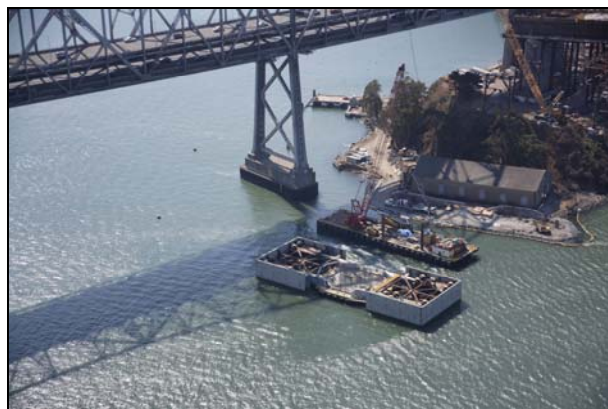
Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
East Span - SAS E2 / T1 Foundations	June 2008	(3)	March 2008	January 2008	(2)

#### Contract Status:

- The SAS E2/T1 Marine Foundations Contract was completed and accepted by Caltrans on January 18, 2008. With completion of this contract, all foundations for the SAS have now been completed.
- The TBPOC is forecasting that the \$313.5 million E2/T1 contract will be closed out with \$32.6 million in forecasted savings that can be returned to the program contingency.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.



(11.1) Aerial Photo of T1

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE CONTRACT

**Contract Description:** The Self-Anchored Suspension (SAS) Superstructure contract constructs a signature tower span between the Skyway and the Yerba Buena Island transition structure. Work on the SAS bridge has been split between three contracts—the SAS Superstructure (under construction), the SAS E2/T1 Foundation (completed), and the SAS W2 Foundation (completed).

#### SAS Superstructure Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS Superstructure						
Capital Outlay Support	214.6	-	214.6	105.6	214.6	-
Capital Outlay Construction	1,753.7	-	1,753.7	528.9	1,767.4	13.7
<b>TOTAL</b>	<b>1,968.3</b>	<b>-</b>	<b>1,968.3</b>	<b>634.5</b>	<b>1,982.0</b>	<b>13.7</b>

Note: Details may not sum to totals due to rounding effects.

#### SAS Superstructure Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
East Span - SAS Superstructure	March 2012	12	March 2013	March 2013	-

#### Contract Status:

- As of September 2008, the SAS bridge contract was 33% completed based on the expended value of the contract.
- Ongoing field and marine work includes the construction of the permanent bent caps E2 & W2 to be completed in early 2009, and temporary structures A, B, C, D, F, G (see the SAS progress diagram on page 15) eastbound and westbound that will support the steel bridge deck of the SAS structure during construction. Completion of all temporary foundation structures is expected in the summer of 2009.
- Bridge fabrication continues at a number of off-site locations around the world with the steel bridge deck sections and steel tower being made in China (see photos #14.1 through #14.6). The cable saddles are being fabricated in Japan and the temporary supports are being fabricated in the United States and in Asia.
- A large barge-mounted crane will be used to erect the new bridge. The completed crane barge will arrive in the Bay Area in early 2009.

**Contract Issues:**

Issue	Mitigating Action
The SAS contractor has stated that the fabrication schedule for the Orthotropic Box Girder (OBG) is 4-5 months behind schedule. While not yet on the critical path for the project, this delay may increase and result in additional cross-impacts to the corridor schedule.	The contractor and Caltrans are developing opportunities for acceleration to mitigate this delay.
Potential for cost increases during construction due to steel plate conflicts. Applies to structural steel, including the towers and box girders.	Established Working Drawing Campus (WDC) with the contractor to facilitate discussion about conflicts and meet regularly. Caltrans has constructed models and identified conflicts for which CCOs are to be prepared.

**Recent TBPOC Actions:** None.



**(13.1)** Artist Rendering of the Completed Bridge



**Contract Photographs from Changxing Island, China**

**(14.1)** Steel Bridge Deck Assembly



**(14.2)** Steel Bridge Deck Assembly



**(14.3)** Steel Bridge Deck Assembly



**(14.4)** Steel Bridge Deck Assembly



**(14.5)** T1 Tower Fabrication






**(14.6)** T1 Tower Fabrication





### **(15.2) Steel Deck Fabrication**

-  SAS field work to be completed  
 SAS field work in progress  
 Completed field work under prior W2 and E2/T1 contracts

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► YERBA BUENA ISLAND DETOUR (YBID)

**Contract Description:** The YBI Detour constructs a temporary detour from the YBI tunnel to the existing east span of the Bay Bridge. This detour maintains traffic on the existing bridge while the YBI Transition Structure Contract completes the tie-in from the SAS to the existing tunnel.

#### YBI Detour Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
YBI Detour						
Capital Outlay Support	29.4	36.6	66.0	49.8	66.0	-
Capital Outlay Construction	132.0	310.2	442.2	233.2	461.2	19.0
<b>TOTAL</b>	<b>161.4</b>	<b>346.8</b>	<b>508.2</b>	<b>283.0</b>	<b>527.2</b>	<b>19.0</b>

Note: Details may not sum to totals due to rounding effects.

#### YBI Detour Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
YBI Detour*	July 2005	40	June 2010	June 2010	-

\* Contract schedule under assessment. See Contract Issues on the following page.

#### Contract Status:

- The TBPOC has approved a number of scope and schedules changes to better time the opening of the detour with the current revised project schedule. Along with pacing the construction of the detour bridge for an opening in mid to late 2009, select bridge work for the Yerba Buena Island transition structures was advanced on the detour contract to minimize schedule risks from construction delays on bridge foundations.
- On the main detour (viaduct section), erection of the main roadway bridge continues (see photos on the following page). This work is 70% complete as of September 2008.
- Work on the west tie-in to the YBI tunnel continues with the construction of the concrete bridge. This work is 35% complete as of September 2008.
- The east tie-in to the existing bridge support foundation system is currently being constructed on Yerba Buena Island, while fabrication of the roll-inn structures (skid beams and truss) has started in Arizona and Washington. The east tie-in field work is 30% complete as of September 2008.
- On the advanced work from the Yerba Buena Island Transition contract, work is continuing on the substructures foundations and columns (see photo #17.4). As of September 2008, 55% of the advanced work been completed.

**Recent TBPOC Actions:** None.

**Contract Issues:**

Issue	Mitigating Action
Caltrans will need to negotiate a number of contract change orders to implement the aforementioned changes to the contract.	The TBPOC has approved a plan of action to implement the changes. Caltrans is currently negotiating outstanding contract changes.

**Contract Photographs**

*(17.1) Detour Viaduct Looking East*



*(17.2) Detour Viaduct Span 49, 50 & 51*



*(17.3) Skid Bents Foundations A6W & A6E*



*(17.4) WTI Phase 2 Frame 1 Substructure Work*



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► YBI TRANSITION CONTRACTS (YBITS)

**Contract Description:** The YBI Transition Structure contracts will construct the mainline YBI Transition Structures (YBITS) that will connect the SAS portion of the new bridge to the newly rolled in WTI Phase I structure. YBITS #1 will construct the mainline approach structure from the new bridge to the WTI Phase I structure. YBITS #2 will demolish the YBI Detour temporary structure, complete the new eastbound on-ramp, reconstruct local affected facilities at YBI and complete the bike path from the SAS to YBI (except for a section of the path that conflicts with existing column E1). That section of the path is contemplated to be completed in the demolition contract. A YBI landscaping contract will restore slopes and vegetation in areas affected by the YBI construction.

#### YBI Transition Structure Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	78.7	-	78.7	21.5	78.7	-
Capital Outlay Construction						
YBITS Contract #1				-	214.3	
YBITS Contract #2				-	58.5	
YBITS Contract #3 - Landscape				-	3.3	
Total Capital Outlay Construction	299.3	(23.2)	276.1	-	276.1	-
<b>TOTAL</b>	<b>378.0</b>	<b>(23.2)</b>	<b>354.8</b>	<b>21.5</b>	<b>354.8</b>	<b>-</b>

Note: Details may not sum to totals due to rounding effects.

#### YBI Transition Structure Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (06/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
YBI Transition Structure	November 2013	12	November 2014	November 2014	-

#### Contract Status:

- The Yerba Buena Transition Structure #1 contract was advertised in August 2008. Caltrans held a contractor's outreach for the contract in September 2008. An addendum was issued on October 24 to change the bid opening date from January 13, 2009 to July 13, 2009.
- The remaining Yerba Buena Island bridge contracts will be advertised at a later date per the project schedule requirement.
- Some foundations and columns for the transition structure are currently being installed by the YBID contract (see photos #19.1 through #19.4 and the Project Progress Diagram in Appendix D).

**Contract Issues:** None.

**Recent TBPOC Actions:** None.

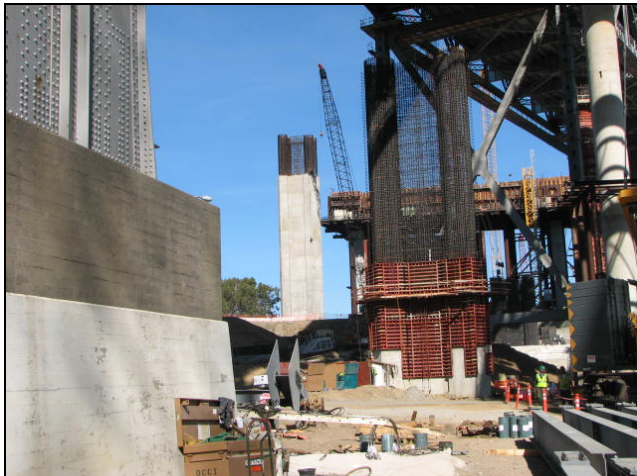
## Contract Photographs



(19.1) YBITS W7 New Soil Nail Wall



(19.2) YBITS Column W6R North



(19.3) YBITS W4R Column



(19.4) Lead Abutment on Existing Roll-in-Roll out Portion of the Bridge



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► OAKLAND TOUCHDOWN CONTRACTS

**Contract Descriptions:** The Oakland Touchdown #1 Contract includes construction of all marine foundations and land foundations (except for the eastbound abutment), westbound bridge section, and one frame of the eastbound bridge section and roadway approach for the section connecting the new Skyway portion to the roadway west of the Oakland Toll Plaza. The Oakland Touchdown #2 Contract includes construction of the remaining eastbound bridge section and roadway approach for the section connecting the new Skyway portion to the roadway west of the Oakland Toll Plaza. This work would occur once the westbound traffic is shifted onto the new westbound bridge, including the SAS. The Submarine Cable Relocation Contract replaced the existing submarine electrical cable from Oakland to Treasure Island and was completed ahead of the OTD Contract #1, which avoided potential construction conflicts.

#### Oakland Touchdown Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	74.4	-	74.4	43.3	92.1	17.7
Capital Outlay Construction						
OTD Submarine Cable	-	-	-	7.9	9.6	-
Oakland Touchdown #1	-	-	-	115.2	226.5	-
Oakland Touchdown #2	-	-	-	-	62.0	-
Oakland Touchdown Electrical	-	-	-	-	4.4	-
Total Capital Outlay Construction	283.8	-	283.8	123.0	303.5	18.7
<b>TOTAL</b>	<b>358.2</b>	<b>-</b>	<b>358.2</b>	<b>166.3</b>	<b>394.6</b>	<b>36.4</b>

Note: Details may not sum to totals due to rounding effects. The allocation of AB144/SB 66 budgets is proceeding. Budget amount is TBD. Overall OTD budgets and forecasts are shown on page 2.

#### Oakland Touchdown Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (6/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
OTD Submarine Cable	-	-	January 2008	January 2008	-
Oakland Touchdown #1	-	-	January 2010	January 2010	-
Oakland Touchdown #2	-	-	November 2014	November 2014	-

#### Contract Status

- The Oakland Touchdown #1 contract was 57% completed based on the expended value of the contract as of the end of September 2008 (see progress diagram in Appendix E).
- On the westbound approach bridge, the contractor has completed all foundation work and is now proceeding on the installation of temporary support falsework and soffit deck for the superstructure. Installation of reinforcing steel on the deck has begun.
- Work is ongoing on the foundation and columns for the eastbound approach bridge (see photo #'s 21.1 through 21.3 on the facing page).
- Foundation work for the new Mole Substation is ongoing.
- The submarine cable relocation contract was completed in January 2008. The Oakland Touchdown #2 contract is in design and will be advertised at a later date per the project schedule.

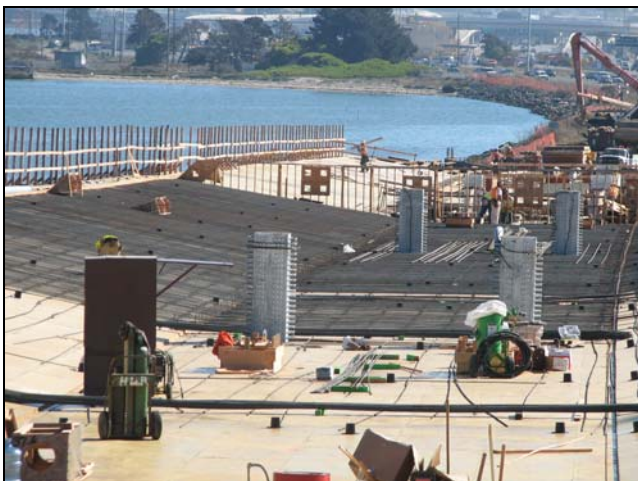
**Contract Issues:** None.

**Recent TBPOC Actions:** None.

### Contract Photographs



**(21.1)** Aerial Photo of the Oakland Touchdown



**(21.2)** Oakland Touchdown Westbound Superstructure Work



**(21.3)** Oakland Touchdown Eastbound Foundation Work





(22.1) Westbound Superstructure Work



(22.2) Westbound Superstructure Work



(22.3) Eastbound Foundation Pile Driving



(22.4) Eastbound Shear Ring Welding in Progress



(22.5) Abutment 23 Wall Area



(22.6) Abutment 23 Wall Area

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► OTHER CONTRACTS

**Contract Descriptions:** Other major contracts include the Stormwater Treatment Measures contract, which will implement best practices for storm water runoff treatment at the SFOBB toll plaza and approaches to the SFOBB toll plaza, and the Existing Bridge Demolition contract, which will include the complete removal of the existing 1936 east span following the opening of the new bridge.

#### Other Major Contracts Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (6/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	85.7	2.0	87.7	8.3	87.7	-
Capital Outlay Construction						-
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	16.6	18.3	-
Total Capital Outlay Construction	254.2	3.3	257.5	16.6	240.3	(17.2)
<b>TOTAL</b>	<b>339.9</b>	<b>5.3</b>	<b>345.2</b>	<b>24.9</b>	<b>328.0</b>	<b>(17.2)</b>

Note: Details may not sum to totals due to rounding effects.

#### Other Major Contracts Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)	% Design Comp.
Existing Bridge Demolition	September 2014	12	September 2015	September 2015	-	10
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-	N/A

#### Contract Status:

**Stormwater Treatment Measures:** The contract was accepted in December 2007.

**Bridge Demolition:** Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension. The \$17.2 million decrease in construction costs for the Existing Bridge Demolition contract is due to a re-evaluation of cost escalation rates for the contract.

**Contract Issues:** None.

**Recent TBPOC Actions:** None

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► OTHER COMPLETED CONTRACTS AND RELATED WORK

**Summary Description:** Substantial work has already been performed on the SFOBB East Span Replacement project to facilitate construction of the mainline construction contracts.

#### Other Contracts and Related Work Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	227.0	(1.0)	226.0	209.0	226.0	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	39.3	72.4	-
Capital Outlay Construction						-
SAS W2 Foundations	26.4	-	26.4	25.8	26.4	-
YBI/SAS Archaeology	1.1	-	1.1	1.1	1.1	-
YBI - USCG Road Relocation	3.0	-	3.0	2.8	3.0	-
YBI - Substation and Viaduct	11.6	-	11.6	11.3	11.6	-
Oakland Geofill	8.2	-	8.2	8.2	8.2	-
Pile Installation Demonstration Project	9.2	-	9.2	9.2	9.2	-
Existing East Span Retrofit	30.8	-	30.8	30.8	30.8	-
Total Capital Outlay Construction Completed	90.3	-	90.3	89.2	90.3	-
<b>TOTAL</b>	<b>389.7</b>	<b>(1.0)</b>	<b>388.7</b>	<b>337.5</b>	<b>388.7</b>	<b>-</b>

Note: Details may not sum to totals due to rounding effects.

#### Other Contracts and Related Work Schedule Summary

Project	Actual Project Completion Date
Existing East Span Retrofit	March 1998
Interim Retrofit	July 2000
Pile Installation Demolition Project	December 2000
YBI / SAS Archaeology	January 2003
Oakland Geofill	April 2003
YBI - USCG Road Relocation	June 2004
SAS W2 Foundations	October 2004
YBI Substation and Viaduct	May 2005

#### Summary Status:

- Construction has been completed on the above-listed contracts. Caltrans continues to work with various environmental agencies to conduct compliance inspections and monitor and mitigate any environmental impacts from the project.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

**Project Description:** The SFOBB West Approach Replacement Project will replace the entire west approach structure from 5th Street to the west anchorage of the existing west spans of the SFOBB while maintaining existing traffic lanes for the weekday commute.

#### SFOBB West Approach Replacement Cost Summary (\$ Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
West Approach						
Capital Outlay Support	120.0	-	120.0	110.0	120.0	-
Capital Outlay Construction	309.0	24.7	333.7	292.5	350.7	17.0
<b>TOTAL</b>	<b>429.0</b>	<b>24.7</b>	<b>453.7</b>	<b>402.5</b>	<b>470.7</b>	<b>17.0</b>

*Note: Details may not sum to totals due to rounding effects.*

#### SFOBB West Approach Replacement Schedule Summary

Project	AB 144/SB 66 Project Completion Baseline (07/2006)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
West Approach	August 2009	-	August 2009	January 2009	(7)
Open-to-Traffic Date: Mainline Realignment			April 2008	April 2008	-

#### Project Status:

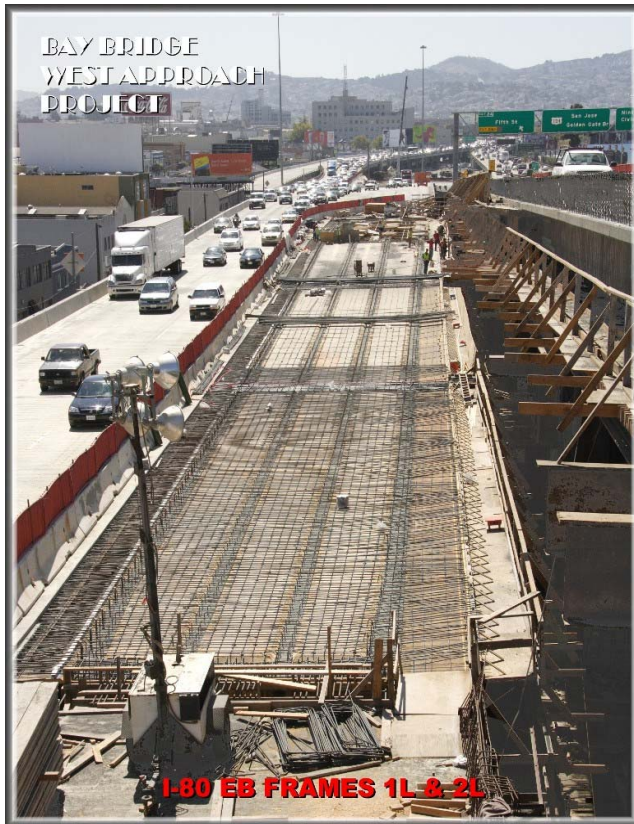
- The project was 95% completed based on the expended value of the contract as of the end of September 2008.
- Both westbound and eastbound I-80 traffic lanes are nearly in the final lane configuration following opening of the reconstructed eastbound west approach in April 2008 (see photos #26.1 and #26.2).
- Ongoing work includes the final widening of the mainline structures, completion of seismic retrofit work on the lower deck near the bridge anchorage, demolition of the temporary upper deck widening near the Fremont Street off-ramp, and completion of a new Sterling eastbound on-ramp (scheduled to be opened before the 2008 Thanksgiving Holiday weekend) and Harrison Street westbound off-ramp (scheduled to be complete by mid-December 2008).

**Project Issues:** None.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.

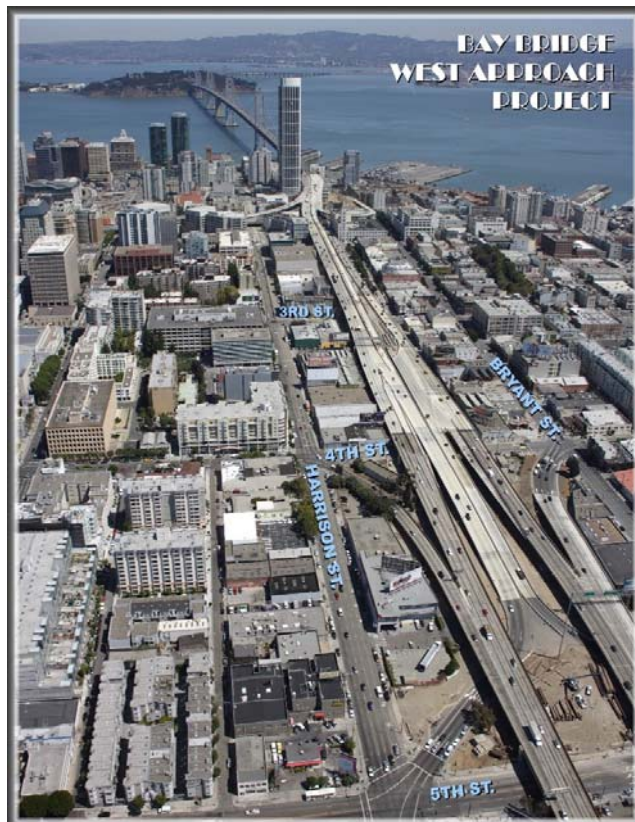
## Contract Photographs



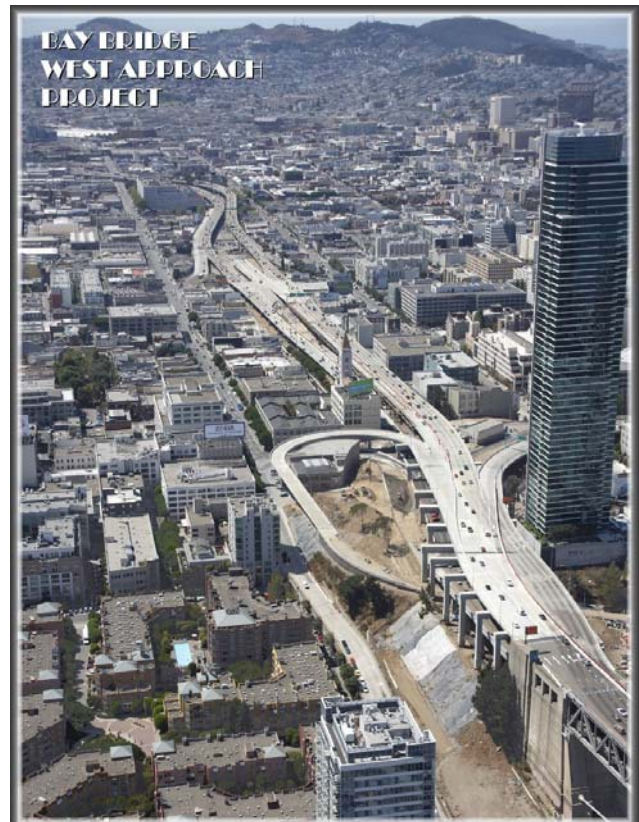
(26.1) Aerial Photographs of the West Approach Project



(26.2) Aerial Photographs of the West Approach Project



(26.3) Aerial Photographs of the West Approach Project



(26.4) Aerial Photographs of the West Approach Project



**Contract Photographs**

*(27.1) Aerial Photographs of the West Approach Project*



*(27.2) Aerial Photographs of the West Approach Project*

## Toll Bridge Seismic Retrofit Program

### Other Completed Seismic Retrofit Projects

**Summary Description:** Caltrans has already completed the seismic retrofits of the West Spans of the SFOBB, the existing 1958 Carquinez Bridge, the existing Benicia-Martinez Bridge, the San Mateo-Hayward Bridge, the Richmond-San Rafael Bridge, and two former toll bridges in Southern California.

### Other Completed Seismic Retrofit Projects Cost Summary (\$ Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	302.0	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
Richmond San Rafael Bridge (RSRB) Seismic Retrofit Project	914.0	(97.5)	816.5	794.8	816.5	-
<b>TOTAL</b>	<b>1839.4</b>	<b>(97.5)</b>	<b>1,741.9</b>	<b>1713.2</b>	<b>1,741.9</b>	<b>-</b>

*Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined.*

### Other Completed Seismic Retrofit Projects Schedule Summary

Project	Actual Project Completion Date
Vincent Thomas Bridge Retrofit	May 2000
San Mateo-Hayward Bridge Retrofit	June 2000
Carquinez Bridge Retrofit	January 2003
San Diego-Coronado Bridge Retrofit	June 2003
Benicia-Martinez Bridge Retrofit	August 2003
SFOBB West Span Seismic Retrofit	June 2004
RSRB Seismic Retrofit	August 2005

**Summary Status:** The budget and cost forecast amounts shown above include allowances for minor project closeout costs.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.

## Toll Bridge Seismic Retrofit Program

### Other Toll Bridges

#### The Dumbarton Bridge

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west (**see photo #29.1**). The route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The annual average daily traffic (AADT) of the route is near 60,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults. The United States Geological Survey (USGS) reports that the San Andreas Fault, some 15 km to the west of the bridge, and the Hayward Fault, some 13 km to the east of the bridge, pose most of the significant seismic threat to the San Francisco Bay Area.

#### The Antioch Bridge

State Route 160 crosses the San Joaquin River between the city of Antioch and Sherman Island (leading to Rio Vista) via the Antioch Bridge (**see photo # 29.2**). The bridge carries a single lane of traffic in each direction. The AADT for the route is slightly over 10,000 vehicles per day. This bridge is threatened by the Bird's Landing Seismic Zone, Coast Range/Sierra Nevada Boundary Zone and the San Andreas Fault.

### Current Progress

Work in the area of bridge structural engineering continues for both bridges. A strategy meeting took place on August 22, 2008 for both projects and consensus by the project teams recommended retrofit strategies for both bridges. Both the Dumbarton and Antioch Bridge seismic retrofit strategies include installation of isolation bearings and strengthening of the piers above the water line. The Dumbarton Bridge retrofit strategy also includes superstructure and deck modifications and additional strengthening of the over-land approach slab structures. The Antioch Bridge retrofit strategy also includes relatively minor modifications to the approach structure on Sherman Island. It was concluded at this meeting that foundation retrofit is not required for either bridge. The design teams presented their proposed strategy schemes and the results of their analysis to the Toll Bridge Seismic Safety Peer Review Panel on September 24, 2008. **The design teams are currently preparing draft estimates based on the above retrofit strategies, which were completed the first week of October 2008.** The design teams met with the regulatory agencies to discuss the scope of work and the schedules, as well as the environmental issues affecting both bridges.

Risk management meetings were held on September 23, 2008 to discuss the risks associated with the retrofit strategy for each bridge. The environmental process is continuing for both projects and once the design/retrofit strategy is completed, all the permit applications will be submitted to the appropriate agencies for their approval (**see schedule in Appendix G**).



(29.1) The Dumbarton Bridge



(29.2) The Antioch Bridge





## PROJECT / CONTRACT REPORTS

### Regional Measure 1 Program

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#### New Benicia-Martinez Bridge Project Summary

- New Benicia-Martinez Bridge Contract
- Other Contracts and Related Project Activities

#### Interstate 880/ State Route 92 Interchange Reconstruction

#### Other Completed Regional Measure 1 Projects

- San Mateo–Hayward Bridge Widening Project
- Richmond Parkway Project
- Bayfront Expressway Widening Project
- Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project
- Richmond-San Rafael Bridge Deck Overlay Project
- New Carquinez Bridge Project

## Regional Measure 1 Program

### New Benicia-Martinez Bridge Project Summary

**Project Description:** The new Benicia-Martinez Bridge Project has constructed a new parallel bridge just east of the existing bridge. The project includes reconstructed interchanges to the north and south of the bridges and a new toll plaza and administration building in Martinez.

### New Benicia-Martinez Bridge Project Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	157.1	35.2	192.3	183.5	192.3	-
Right-of-Way and Others	20.4	(0.1)	20.3	16.9	20.3	-
Capital Outlay						-
New Bridge	672.0	94.6	766.6	763.8	766.6	-
I-680/I-780 Interchange Replacement	76.3	26.9	103.2	98.5	103.2	-
I-680/Marina Vista Interchange Reconstruction	51.5	4.9	56.4	56.1	56.4	-
New Toll Plaza	24.3	2.0	26.3	23.4	26.3	-
Existing Bridge & Interchange Modifications	17.2	42.3	59.5	14.4	59.5	-
Other	20.3	2.8	23.1	15.6	23.1	-
Project Reserve	20.8	4.0	24.8	-	24.8	-
<b>TOTAL</b>	<b>1,059.9</b>	<b>212.6</b>	<b>1,272.5</b>	<b>1,172.2</b>	<b>1,272.5</b>	<b>-</b>

Note: Details may not sum to totals due to rounding effects.

The budget and estimate at completion includes approximately \$33 million in non-toll bridge funds (Proposition 192 and SHOPP).

### New Benicia-Martinez Bridge Project Schedule Summary

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
New Bridge Open to Traffic	December 2007	-	August 2007	August 2007	-
Existing Bridge & Interchange Modifications	December 2009	-	December 2009	December 2009	-

### Project Status:

- The new northbound bridge was opened to traffic in August 2007.
- The existing bridge (southbound) and interchange modification contract was 50% complete based on the expended value of the contract as of the end of September 2008.
- Stage 1 of the contract has been completed with the removal of the old toll plaza, and repair of the bridge deck and roadway undulations on the east side of the existing bridge and south approach. Southbound traffic was realigned to the east side of the existing bridge on August 15, 2008 for the start of Stage 2 work (see photos # 32.1 through #32.4).
- Stage 2 work, which includes the deck and roadway undulation repairs along the west side of the existing bridge and south approach, raising of the portions of the Mococo road overcrossing to match the new lane alignments and construction of a new bicycle/pedestrian pathway across the existing bridge, is ongoing.

**Project Issues:** None.

**Recent TBPOC Actions:** None.

## Contract Photographs



**(32.1)** AC Grinding Completed South of Moccoco Bridge



**(32.2)** Completed Roadway Section at Marina Vista



**(32.3)** Deck Repair at the West Side of the Old Benicia Bridge



**(32.4)** Newly Ground Pavement at Marina Vista

## Regional Measure 1 Program

**Interstate 880/State Route 92 Interchange Reconstruction Project**

**Project Description:** Modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations.

**Interstate 880/State Route 92 Interchange Cost Summary (\$ Millions)**

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
I-880/SR-92 Interchange Improvement						
Capital Outlay Support	28.8	26.2	55.0	42.2	55.0	-
Capital Outlay Construction	94.8	60.2	155.0	37.9	155.0	-
Capital Outlay Right-of-Way	9.9	7.0	16.9	11.0	16.9	-
Project Reserve	0.3	17.8	18.1	-	18.1	-
<b>TOTAL</b>	<b>133.8</b>	<b>111.2</b>	<b>245.0</b>	<b>91.1</b>	<b>245.0</b>	<b>-</b>

Note: Details may not sum to totals due to rounding effects. \$9.6 million in ACTA funds included under Capital Outlay Construction. \$3.0 million included in Capital Outlay Construction and \$1.0 million in Capital Outlay Support for separate landscape contract.

**Interstate 880/State Route 92 Interchange Schedule Summary**

Project	BATA Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2008)	Contract Complete Schedule Forecast (09/2008)	Schedule Variance (Months)
I-880/SR-92 Interchange Reconstruction	December 2010	-	June 2011	June 2011	-

**Project Status:**

- The project was 32% completed based on the expended value of the contract as of the end of September 2008.
- On the new eastbound State Route 92 to northbound I-880 connector, all foundations have been completed. The contractor has erected temporary support falsework over I-880 and is continuing with the installation of reinforcement steel for the new structure with the first concrete structure pour occurring on October 15<sup>th</sup> (see photo #6.1 on page 6).
- Other ongoing work includes the construction of various retaining and soundwalls throughout the project limits, construction of a new pedestrian overcrossing of I-880 at Eldridge Avenue and widening of SR-92 at Mount Eden. Paving operations continue on various areas of the job. The Hesperian Boulevard on-ramp to eastbound SR-92 remains closed while it is being realigned.

**Project Issues:** None.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.



**Contract Photographs**

**(34.1)** Micro Tunneling at the Corp Yard for the 457mm Water Line under I-880.



**(34.2)** Falsework Erection at the Southwest Quadrant Looking East at Abutment 8 and Bents 7, 6, 5 and 4



## An aerial photograph showing a complex multi-level highway interchange. The interchange features several overpasses and curved ramps connecting different roadways. Large areas of land adjacent to the highway are under construction or recently cleared, showing bare earth and some construction equipment. Residential neighborhoods with houses and trees are visible on the left and right sides of the highway. The image is oriented vertically on the page.

[illegible]

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## Regional Measure 1 Program

### Other Completed Regional Measure 1 (RM1) Projects

**Summary Description:** Other completed Regional Measure 1 projects are the following: (a) Widen the San Mateo-Hayward Bridge along its low-trestle section and its eastern approach; (b) Widen the Bayfront Expressway (SR-84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange; (c) Construct an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole; (d) Modify the U.S. 101/University Avenue interchange; (e) Richmond-San Rafael Bridge Trestle, Fender and Deck Joint Rehabilitation Project; (f) Richmond-San Rafael Bridge Deck Overlay Project; (g) Construct a new suspension bridge with four westbound lanes and a bicycle/pedestrian lane west of the existing Carquinez Bridge and demolition of the existing 1927 bridge.

### Other Completed RM1 Projects Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
San Mateo-Hayward Bridge Widening Project	217.8	-	217.8	208.7	211.9	(5.9)
Bayfront Expressway Widening Project	36.1	-	36.1	33.4	36.0	(0.1)
Richmond Parkway Project	5.9	-	5.9	4.3	5.9	-
U.S. 101/University Interchange	3.8	-	3.8	3.7	3.8	-
RSRB Trestle, Fender, and Joint Rehabilitation	103.1	-	103.1	96.3	97.1	(5.0)
RSRB Deck Overlay	25.0	-	25.0	19.6	25.0	-
New Carquinez Bridge Project	528.2	-	528.2	509.5	519.2	(9.0)
<b>TOTAL</b>	<b>1310.6</b>		<b>1310.6</b>	<b>1241.5</b>	<b>1278.6</b>	<b>(31.0)</b>

### Schedule Summary

Project	Actual Project Completion Date
Richmond Parkway Project	May 2001
San Mateo-Hayward Bridge Widening Project	February 2003
Bayfront Expressway Widening Project	January 2004
U.S. 101/University Interchange	April 2004
Richmond-San Rafael Bridge Trestle, Fender and Deck Joint Rehabilitation	August 2005
RSR Deck Overlay	December 2006
New Carquinez Bridge Project	December 2007

#### Project Status:

- All significant construction has been completed on the above listed projects. The budget and cost forecasts amounts shown above include allowances for minor project closeout costs.

**Project Issues:** None.



## APPENDICES

- A** Toll Bridge Seismic Retrofit Program:  
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost  
Detail
- B** Toll Bridge Seismic Retrofit Program Cost Detail
- C** Toll Bridge Seismic Retrofit Program Summary Schedule
- D** Regional Measure 1 Program Cost Detail
- E** Regional Measure 1 Program Summary Schedule
- F** West Approach Progress Diagram
- G** Antioch/Dumbarton Bridge Baseline Schedule
- H** Regional Measure 1 Program Cost Detail
- I** Regional Measure 1 Program Summary Schedule
- J** Glossary of Terms

*\* Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.*



## Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

**San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail**

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
<b>San Francisco-Oakland Bay Bridge East Span Replacement Project</b>							
<b>East Span - Skyway</b>	<b>01202X</b>						
Capital Outlay Support		197.0	(16.0)	181.0	180.8	181.0	-
Capital Outlay Construction		1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-
<b>Total</b>		1,490.0	(54.9)	1,435.1	1,417.3	1,435.1	-
<b>East Span - SAS E2/T1 Foundations</b>	<b>0120EX</b>						
Capital Outlay Support		52.5	(21.5)	31.0	28.3	31.0	-
Capital Outlay Construction		313.5	(32.6)	280.9	274.5	280.9	-
<b>Total</b>		366.0	(54.1)	311.9	302.8	311.9	-
<b>East Span - SAS Superstructure</b>	<b>0120FX</b>						
Capital Outlay Support		214.6	-	214.6	105.6	214.6	-
Capital Outlay Construction		1,753.7	-	1,753.7	528.9	1,912.5	158.8
<b>Total</b>		1,968.3	-	1,968.3	634.5	2,127.1	158.8
<b>SAS W2 Foundations</b>	<b>0120CX</b>						
Capital Outlay Support		10.0	-	10.0	9.2	10.0	-
Capital Outlay Construction		26.4	-	26.4	25.8	26.4	-
<b>Total</b>		36.4	-	36.4	35.0	36.4	-
<b>YBI South/South Detour</b>	<b>0120RX</b>						
Capital Outlay Support		29.4	36.6	66.0	49.8	66.0	-
Capital Outlay Construction		132.0	310.2	442.2	233.2	461.2	19.0
<b>Total</b>		161.4	346.8	508.2	283.0	527.2	19.0
<b>YBI Transition Structures (see notes below)</b>	<b>0120PX</b>						
Capital Outlay Support		78.7	-	78.7	21.5	78.7	-
Capital Outlay Construction		299.3	(23.2)	276.1	-	276.1	-
<b>Total</b>		378.0	(23.2)	354.8	21.5	354.8	-
<b>* YBI- Transition Structures Contract No. 1</b>							
Capital Outlay Support					3.4	45.0	
Capital Outlay Construction					-	214.3	
<b>Total</b>					3.4	259.3	
<b>* YBI- Transition Structures Contract No. 2</b>							
Capital Outlay Support					1.7	16.0	
Capital Outlay Construction					-	58.5	
<b>Total</b>					1.7	74.5	
<b>* YBI- Transition Structures Contract No. 3 Landscape</b>							
Capital Outlay Support					-	1.0	
Capital Outlay Construction					-	3.3	
<b>Total</b>					-	4.3	
<b>Oakland Touchdown (see notes below)</b>	<b>01204X</b>						
Capital Outlay Support		74.4	-	74.4	43.3	92.1	17.7
Capital Outlay Construction		283.8	-	283.8	123.0	302.5	18.7
<b>Total</b>		358.2	-	358.2	166.3	394.6	36.4
<b>* OTD Submarine Cable</b>	<b>0120K4</b>						
Capital Outlay Support					0.9	3.0	
Capital Outlay Construction					7.9	9.6	
<b>Total</b>					8.8	12.6	
<b>* OTD No. 1 (Westbound)</b>	<b>0120L4</b>						
Capital Outlay Support					20.7	49.9	
Capital Outlay Construction					115.2	226.5	
<b>Total</b>					135.9	276.4	
<b>* OTD No. 2 (Eastbound)</b>	<b>0120M4</b>						
Capital Outlay Support					1.2	15.8	
Capital Outlay Construction					-	62.0	
<b>Total</b>					1.2	77.8	
<b>* OTD Electrical Systems</b>	<b>0120N4</b>						
Capital Outlay Support					0.5	1.4	
Capital Outlay Construction					-	4.4	
<b>Total</b>					0.5	5.8	

Notes: YBI Transition Structures and Oakland Touchdown Cost-to-Date and Cost Forecast includes prior-to-split Capital Outlay Support Costs.

Note: Details may not sum to totals due to rounding effects.

## Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

## SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) EAST SPAN REPLACEMENT PROJECT COST DETAIL (CONT'D.)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
<b>Existing Bridge Demolition</b>	<b>01209X</b>						
Capital Outlay Support		79.7	-	79.7	0.4	79.7	-
Capital Outlay Construction		239.2	-	239.2	-	222.0	(17.2)
<b>Total</b>		318.9	-	318.9	0.4	301.7	(17.2)
<b>YBI/SAS Archeology</b>	<b>01207X</b>						
Capital Outlay Support		1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction		1.1	-	1.1	1.1	1.1	-
<b>Total</b>		2.2	-	2.2	2.2	2.2	-
<b>YBI - USCG Road Relocation</b>	<b>0120QX</b>						
Capital Outlay Support		3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction		3.0	-	3.0	2.8	3.0	-
<b>Total</b>		6.0	-	6.0	5.5	6.0	-
<b>YBI - Substation and Viaduct</b>	<b>0120GX</b>						
Capital Outlay Support		6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction		11.6	-	11.6	11.3	11.6	-
<b>Total</b>		18.1	-	18.1	17.7	18.1	-
<b>Oakland Geofill</b>	<b>01205X</b>						
Capital Outlay Support		2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction		8.2	-	8.2	8.2	8.2	-
<b>Total</b>		10.7	-	10.7	10.7	10.7	-
<b>Pile Installation Demonstration Project</b>	<b>01208X</b>						
Capital Outlay Support		1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction		9.2	-	9.2	9.2	9.2	-
<b>Total</b>		11.0	-	11.0	11.0	11.0	-
<b>Stormwater Treatment Measures</b>	<b>0120JX</b>						
Capital Outlay Support		6.0	2.0	8.0	7.9	8.0	-
Capital Outlay Construction		15.0	3.3	18.3	16.6	18.3	-
<b>Total</b>		21.0	5.3	26.3	24.5	26.3	-
<b>Right-of-Way and Environmental Mitigation</b>	<b>0120X9</b>						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72.4	-	72.4	39.3	72.4	-
<b>Total</b>		72.4	-	72.4	39.3	72.4	-
	<b>04343X &amp; 04300X</b>						
<b>Sunk Cost - Existing East Span Retrofit</b>							
Capital Outlay Support		39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction		30.8	-	30.8	30.8	30.8	-
<b>Total</b>		70.3	-	70.3	70.3	70.3	-
<b>Other Capital Outlay Support</b>							
Environmental Phase		97.7	-	97.7	97.7	97.7	-
Pre-Split Project Expenditures		44.9	-	44.9	44.9	44.9	-
Non-project Specific Costs		20.0	(1.0)	19.0	3.2	19.0	-
<b>Total</b>		162.6	(1.0)	161.6	145.8	161.6	-
<b>Subtotal Capital Outlay Support</b>		959.3	-	959.3	646.6	977.1	17.7
<b>Subtotal Capital Outlay Construction</b>		4,492.2	218.8	4,711.0	2,541.2	4,890.3	179.3
<b>Other Budgeted Capital</b>		35.1	(3.3)	31.8	0.7	7.7	(24.1)
<b>Total SFOBB East Span Replacement Project</b>		<b>5,486.6</b>	<b>215.5</b>	<b>5,702.1</b>	<b>3,188.5</b>	<b>5,875.1</b>	<b>173.0</b>

Note: Details may not sum to totals due to rounding effects.

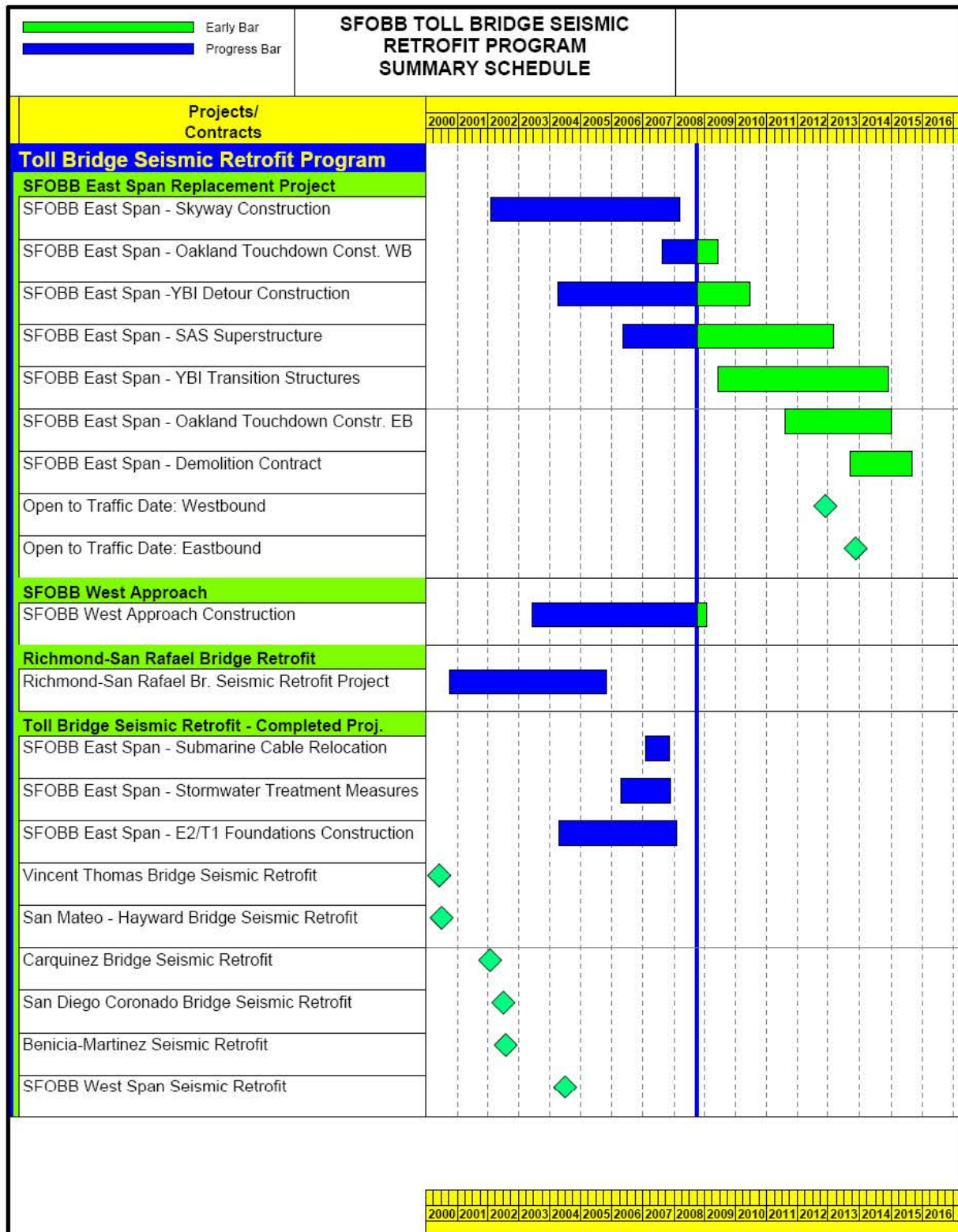


## Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail (\$ Millions)

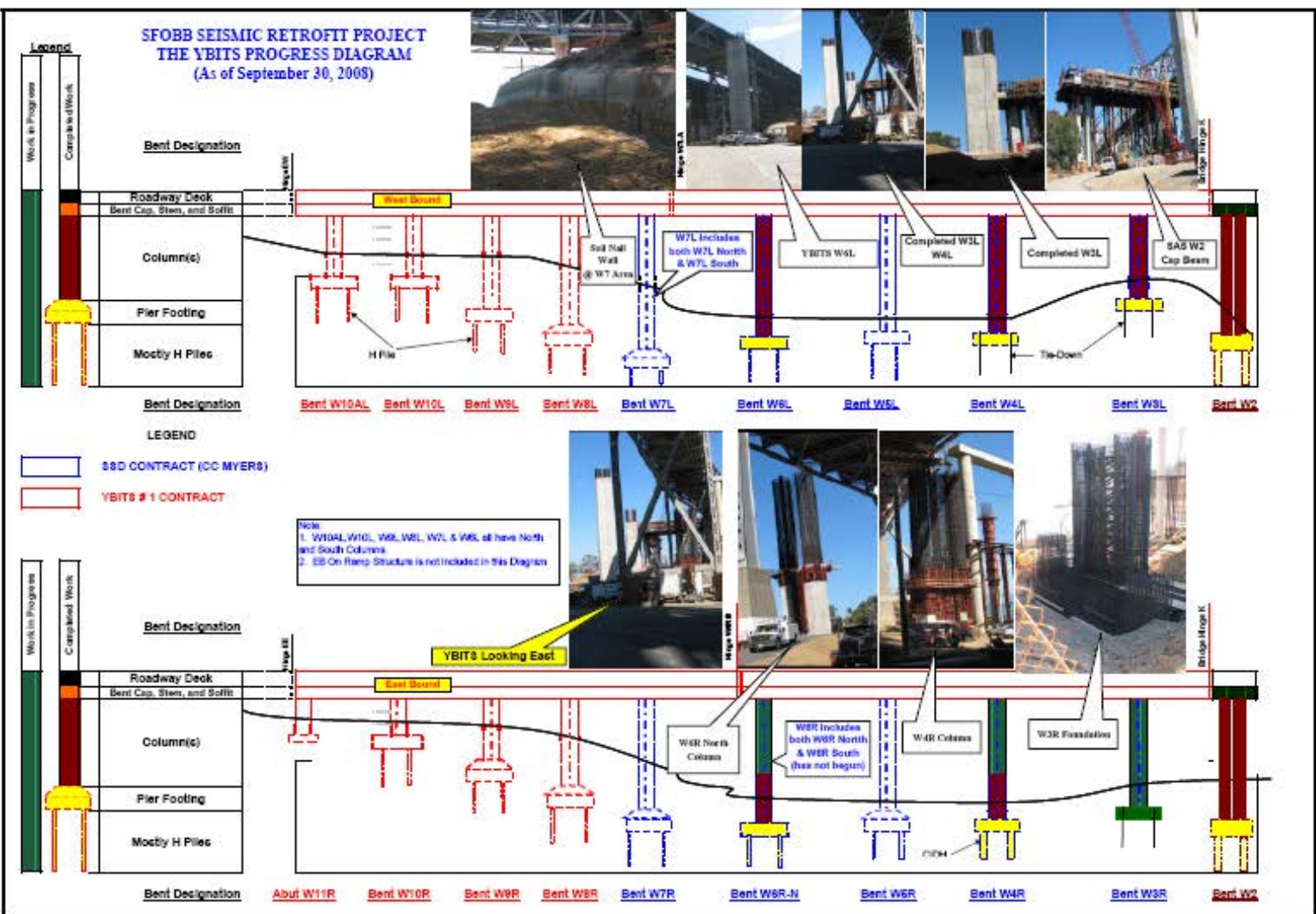
Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
<b>SFOBB East Span Replacement Project</b>						
Capital Outlay Support	959.3	-	959.3	646.6	977.1	17.8
Capital Outlay Construction	4,492.2	218.8	4,711.0	2,541.2	4,890.3	179.3
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
<b>Total</b>	<b>5,486.6</b>	<b>215.5</b>	<b>5,702.1</b>	<b>3,188.5</b>	<b>5,875.1</b>	<b>173.0</b>
<b>SFOBB West Approach Replacement</b>						
Capital Outlay Support	120.0	-	120.0	110.0	120.0	-
Capital Outlay Construction	309.0	24.7	333.7	292.5	350.7	17.0
<b>Total</b>	<b>429.0</b>	<b>24.7</b>	<b>453.7</b>	<b>402.5</b>	<b>470.7</b>	<b>17.0</b>
<b>SFOBB West Span Retrofit</b>						
Capital Outlay Support	75.0	-	75.0	74.8	75.0	-
Capital Outlay Construction	232.9	-	232.9	227.2	232.9	-
<b>Total</b>	<b>307.9</b>	<b>-</b>	<b>307.9</b>	<b>302.0</b>	<b>307.9</b>	<b>-</b>
<b>Richmond-San Rafael Bridge Retrofit</b>						
Capital Outlay Support	134.0	(7.0)	127.0	126.7	127.0	-
Capital Outlay Construction	780.0	(90.5)	689.5	668.1	689.5	-
<b>Total</b>	<b>914.0</b>	<b>(97.5)</b>	<b>816.5</b>	<b>794.8</b>	<b>816.5</b>	<b>-</b>
<b>Benicia-Martinez Bridge Retrofit</b>						
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
<b>Total</b>	<b>177.8</b>	<b>-</b>	<b>177.8</b>	<b>177.8</b>	<b>177.8</b>	<b>-</b>
<b>Carquinez Bridge Retrofit</b>						
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction	85.5	-	85.5	85.4	85.5	-
<b>Total</b>	<b>114.2</b>	<b>-</b>	<b>114.2</b>	<b>114.2</b>	<b>114.2</b>	<b>-</b>
<b>San Mateo-Hayward Bridge Retrofit</b>						
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
<b>Total</b>	<b>163.5</b>	<b>-</b>	<b>163.5</b>	<b>163.4</b>	<b>163.5</b>	<b>-</b>
<b>Vincent Thomas Bridge Retrofit (Los Angeles)</b>						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	-	42.1	42.0	42.1	-
<b>Total</b>	<b>58.5</b>	<b>-</b>	<b>58.5</b>	<b>58.4</b>	<b>58.5</b>	<b>-</b>
<b>San Diego-Coronado Bridge Retrofit</b>						
Capital Outlay Support	33.5	-	33.5	33.2	33.5	-
Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
<b>Total</b>	<b>103.5</b>	<b>-</b>	<b>103.5</b>	<b>102.6</b>	<b>103.5</b>	<b>-</b>
<b>Subtotal Capital Outlay Support</b>	<b>1,433.1</b>	<b>(7.0)</b>	<b>1,426.1</b>	<b>1,102.7</b>	<b>1,443.9</b>	<b>17.8</b>
<b>Subtotal Capital Outlay</b>	<b>6,286.8</b>	<b>153.0</b>	<b>6,439.8</b>	<b>4,200.8</b>	<b>6,636.1</b>	<b>196.3</b>
<b>Subtotal Other Budgeted Capital</b>	<b>35.1</b>	<b>(3.3)</b>	<b>31.8</b>	<b>0.7</b>	<b>7.7</b>	<b>(24.1)</b>
<b>Miscellaneous Program Costs</b>	<b>30.0</b>	<b>-</b>	<b>30.0</b>	<b>24.7</b>	<b>30.0</b>	<b>-</b>
<b>Subtotal Toll Bridge Seismic Retrofit Program</b>	<b>7,785.0</b>	<b>142.7</b>	<b>7,927.7</b>	<b>5,328.9</b>	<b>8,117.7</b>	<b>190.0</b>
<b>Program Contingency</b>	<b>900.0</b>	<b>(142.7)</b>	<b>757.3</b>	<b>-</b>	<b>567.3</b>	<b>(190.0)</b>
<b>Total Toll Bridge Seismic Retrofit Program</b>	<b>8,685.0</b>	<b>-</b>	<b>8,685.0</b>	<b>5,328.9</b>	<b>8,685.0</b>	<b>-</b>

Note: Details may not sum to totals due to rounding effects.

## Appendix C: Toll Bridge Seismic Retrofit Program Summary Schedule

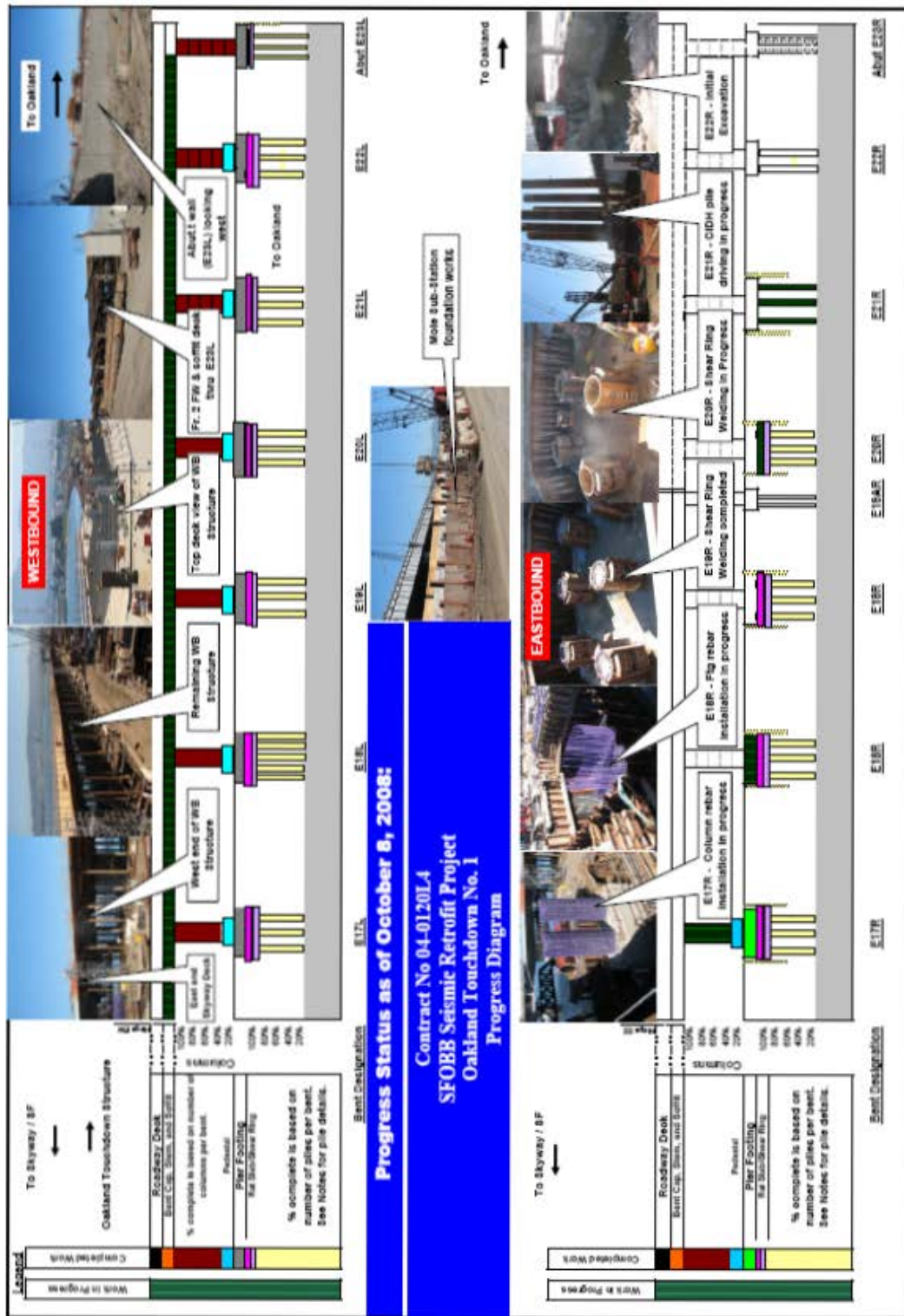


## Appendix D: YBITS Progress Diagram

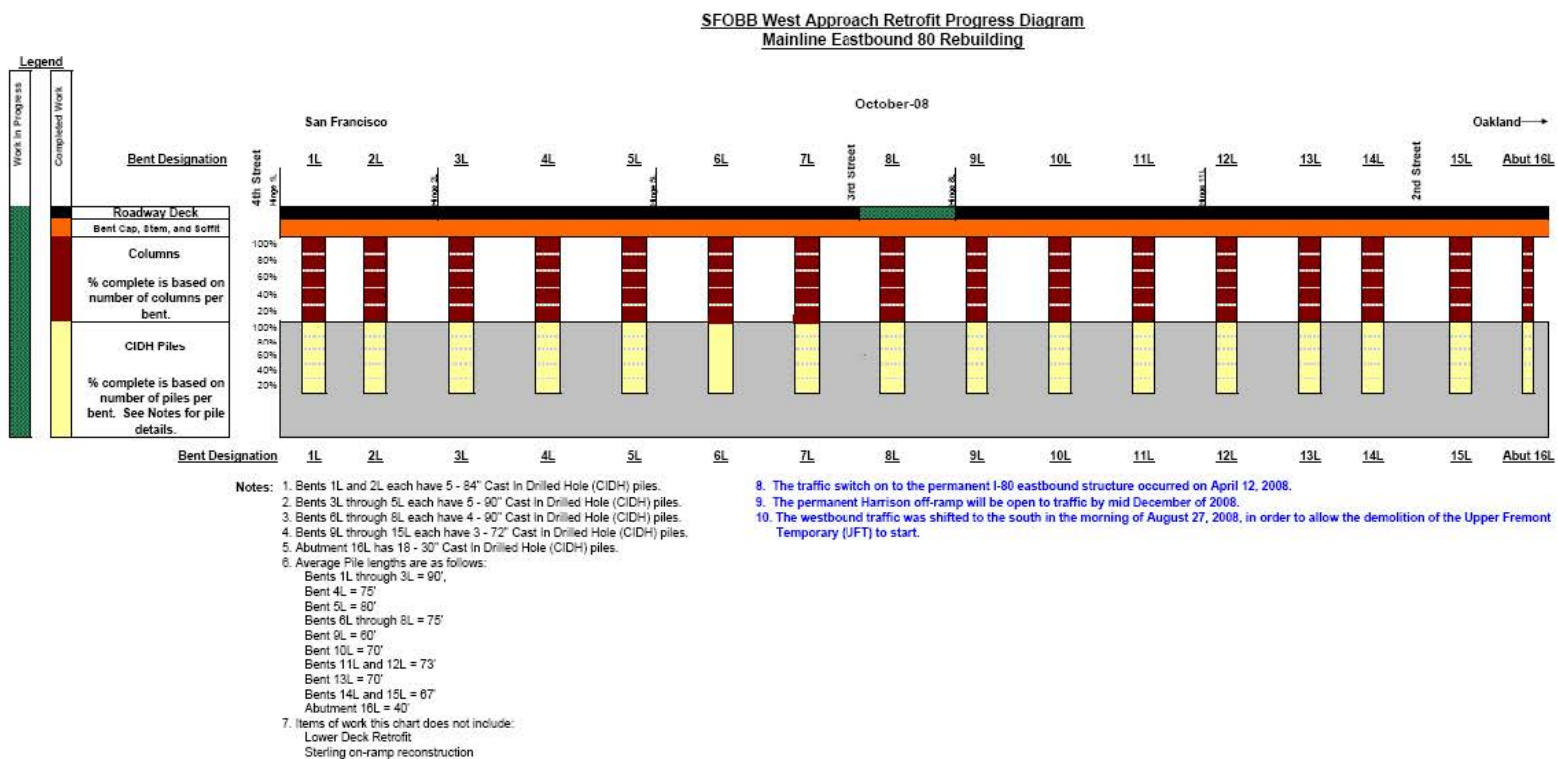




## Appendix E: OTD #1 Progress Diagram

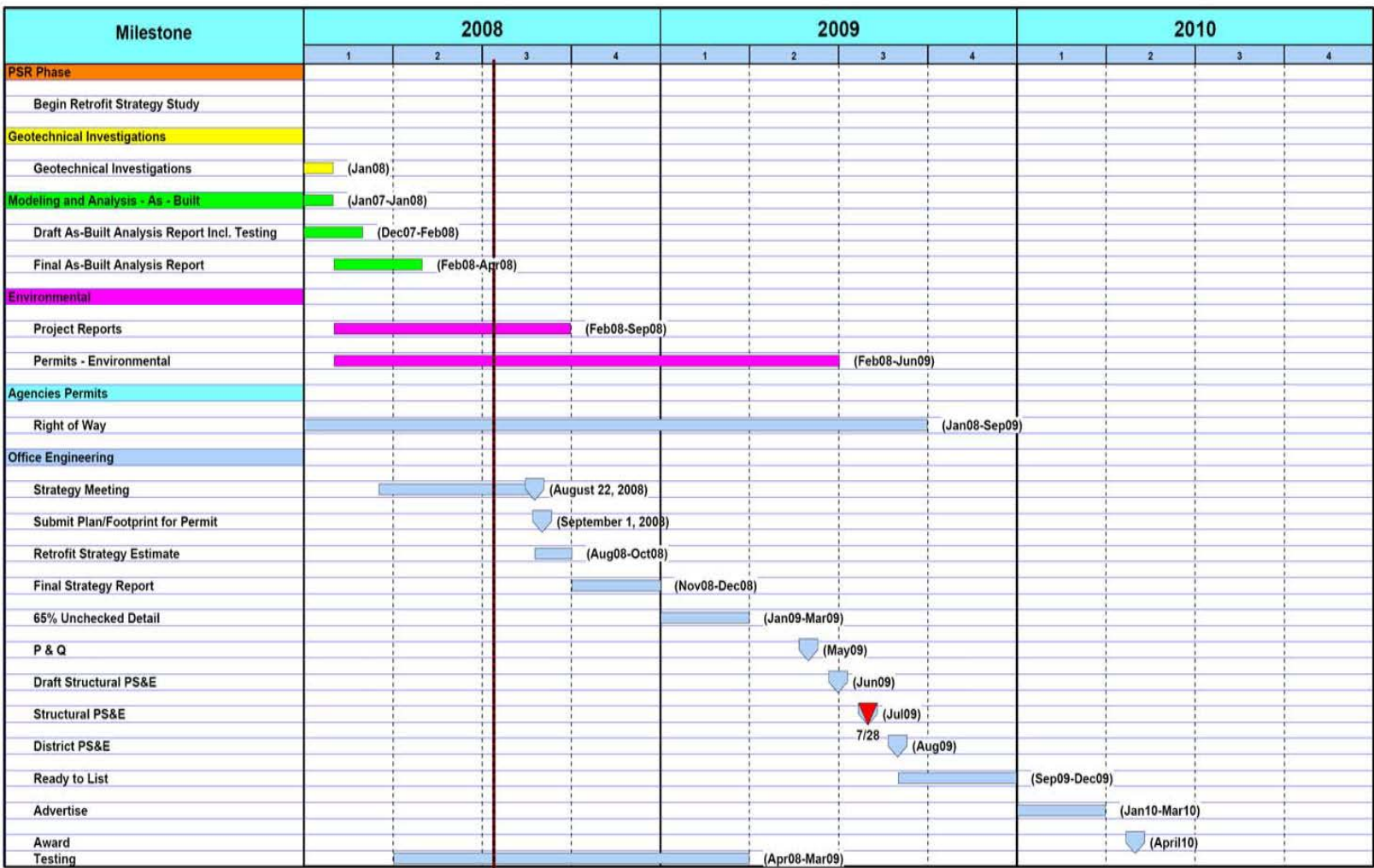


## Appendix F: West Approach Progress Diagram





## Appendix G: Antioch/Dumbarton Bridge Baseline Schedule



## Appendix H: Regional Measure 1 Program Cost Detail (\$ Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
<b>New Benicia-Martinez Bridge Project</b>							
<b>New Bridge</b>	<b>00603_</b>						
Capital Outlay Support		84.9	6.7	91.6	91.5	91.6	-
Capital Outlay Construction				-			-
BATA Funding		661.9	94.6	756.5	753.7	756.5	-
Non-BATA Funding		10.1	-	10.1	10.1	10.1	-
Subtotal		672.0	94.6	766.6	763.8	766.6	-
<b>Total</b>		756.9	101.3	858.2	855.3	858.2	-
<b>I-680/I-780 Interchange Reconstruction</b>							
<b>00606_</b>							
Capital Outlay Support							
BATA Funding		24.9	5.2	30.1	30.0	30.1	-
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	-
Subtotal		26.3	10.4	36.7	36.3	36.7	-
Capital Outlay Construction							
BATA Funding		54.7	26.9	81.6	76.8	81.6	-
Non-BATA Funding		21.6	-	21.6	21.7	21.6	-
Subtotal		76.3	26.9	103.2	98.5	103.2	-
<b>Total</b>		102.6	37.3	139.9	134.8	139.9	-
<b>I-680/Marina Vista Interchange Reconstruction</b>							
<b>00605_</b>							
Capital Outlay Support		18.3	1.8	20.1	19.9	20.1	-
Capital Outlay Construction		51.5	4.9	56.4	56.1	56.4	-
<b>Total</b>		69.8	6.7	76.5	76.0	76.5	-
<b>New Toll Plaza and Administration Building</b>							
<b>00604_</b>							
Capital Outlay Support		11.9	3.8	15.7	15.7	15.7	-
Capital Outlay Construction		24.3	2.0	26.3	23.4	26.3	-
<b>Total</b>		36.2	5.8	42.0	39.1	42.0	-
<b>Existing Bridge &amp; Interchange Modifications</b>							
<b>0060A_</b>							
Capital Outlay Support		4.3	14.3	18.6	12.9	18.6	-
Capital Outlay Construction							
BATA Funding		17.2	32.8	50.0	14.4	50.0	-
Non-BATA Funding		-	9.5	9.5	-	9.5	-
Subtotal		17.2	42.3	59.5	14.4	59.5	-
<b>Total</b>		21.5	56.6	78.1	27.3	78.1	-
<b>Other Contracts</b>							
<b>See note below</b>							
Capital Outlay Support		11.4	(1.8)	9.6	7.2	9.6	-
Capital Outlay Construction		20.3	2.8	23.1	15.6	23.1	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	16.9	20.3	-
<b>Total</b>		52.1	0.9	53.0	39.7	53.0	-
<b>Subtotal BATA Capital Outlay Support</b>		155.7	30.0	185.7	177.2	185.7	-
<b>Subtotal BATA Capital Outlay Construction</b>		829.9	164.0	993.9	940.0	993.9	-
<b>Subtotal Capital Outlay Right-of-Way</b>		20.4	(0.1)	20.3	16.9	20.3	-
<b>Subtotal Non-BATA Capital Outlay Support</b>		1.4	5.2	6.6	6.3	6.6	-
<b>Subtotal Non-BATA Capital Outlay Construction</b>		31.7	9.5	41.2	31.8	41.2	-
<b>Project Reserves</b>		20.8	4.0	24.8	-	24.8	-
<b>Total New Benicia-Martinez Bridge Project</b>		<b>1,059.9</b>	<b>212.6</b>	<b>1,272.5</b>	<b>1,172.2</b>	<b>1,272.5</b>	<b>-</b>

Notes: Includes EA's 00601\_, 00603\_, 00605\_, 00606\_, 00608\_, 00609\_, 0060A\_, 0060C\_, 0060E\_, 0060F\_, 0060G\_, and 0060H\_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding effects.

## Appendix H: Regional Measure 1 Program Cost Detail (\$ Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
<b>Carquinez Bridge Replacement Project</b>							
<b>New Bridge</b>	<b>01301_</b>						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	4.0	257.3	255.9	257.3	-
<b>Total</b>		313.8	3.7	317.5	316.1	317.5	-
<b>Crockett Interchange Reconstruction</b>	<b>01305_</b>						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	-	73.9	71.9	73.9	-
<b>Total</b>		105.9	(0.1)	105.8	103.8	105.8	-
<b>Existing 1927 Bridge Demolition</b>	<b>01309_</b>						
Capital Outlay Support		16.1	-	16.1	15.4	15.5	(0.6)
Capital Outlay Construction		35.2	-	35.2	34.8	35.2	-
<b>Total</b>		51.3	-	51.3	50.2	50.7	(0.6)
<b>Other Contracts</b>	<b>See note below</b>						
Capital Outlay Support		15.8	0.2	16.0	16.1	16.0	-
Capital Outlay Construction		18.8	(0.8)	18.0	16.2	18.1	0.1
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-
<b>Total</b>		45.1	(0.6)	44.5	42.2	44.6	0.1
<b>Subtotal BATA Capital Outlay Support</b>		124.4	(0.2)	124.2	123.6	123.6	(0.6)
<b>Subtotal BATA Capital Outlay Construction</b>		381.2	3.2	384.4	378.8	384.5	0.1
<b>Subtotal Capital Outlay Right-of-Way</b>		10.5	-	10.5	9.9	10.5	-
<b>Project Reserves</b>		12.1	(3.0)	9.1	-	0.6	(8.5)
<b>Total Carquinez Bridge Replacement Project</b>		<b>528.2</b>	<b>-</b>	<b>528.2</b>	<b>512.3</b>	<b>519.2</b>	<b>(9.0)</b>

## Notes:

Other Contracts includes EA's 01301\_, 01302\_, 01303\_, 01304\_, 01305\_, 01306\_, 01307\_, 01308\_, 01309\_, 0130A\_, 0130C\_, 0130D\_, 0130F\_, 0130G\_, 0130H\_, 0130J\_, 00453\_, 00493\_, 04700\_, 00607\_, 2A270\_, and 29920\_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding effects.

## Appendix H: Regional Measure 1 Program Cost Detail (\$ Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
<b>Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation</b>	<b>See note <sup>1</sup> below</b>						
Capital Outlay Support							
BATA Funding		2.2	-	2.2	1.4	2.2	-
Non-BATA Funding		8.6	-	8.6	10.4	10.4	1.8
Subtotal		10.8	-	10.8	11.8	12.6	1.8
Capital Outlay Construction							
BATA Funding		40.2	-	40.2	33.4	33.4	(6.8)
Non-BATA Funding		51.1	-	51.1	51.1	51.1	-
Subtotal		91.3	-	91.3	84.5	84.5	(6.8)
Project Reserves		-	-	-	-	-	-
<b>Total</b>		<b>102.1</b>	<b>-</b>	<b>102.1</b>	<b>96.3</b>	<b>97.1</b>	<b>(5.0)</b>
<b>Richmond-San Rafael Bridge Deck Overlay Rehabilitation</b>	<b>04152_</b>						
Capital Outlay Support							
BATA Funding		4.0	(0.4)	3.6	3.3	3.6	-
Non-BATA Funding		4.0	(4.0)	-	-	-	-
Subtotal		8.0	(4.4)	3.6	3.3	3.6	-
Capital Outlay Construction		16.9	3.6	20.5	16.3	16.2	(4.3)
Project Reserves		0.1	0.8	0.9	-	5.2	4.3
<b>Total</b>		<b>25.0</b>	<b>-</b>	<b>25.0</b>	<b>19.6</b>	<b>25.0</b>	<b>-</b>
<b>Richmond Parkway Project (RM 1 Share Only)</b>	<b>Non-Caltrans</b>						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		5.9	-	5.9	4.3	5.9	-
<b>Total</b>		<b>5.9</b>	<b>-</b>	<b>5.9</b>	<b>4.3</b>	<b>5.9</b>	<b>-</b>
<b>San Mateo-Hayward Bridge Widening</b>	<b>See note <sup>2</sup> below</b>						
Capital Outlay Support		34.6	(0.3)	34.3	34.1	34.3	-
Capital Outlay Construction		180.2	-	180.2	174.1	176.2	(4.0)
Capital Outlay Right-of-Way		1.5	-	1.5	0.5	0.6	(0.9)
Project Reserves		1.5	0.3	1.8	-	0.8	(1.0)
<b>Total</b>		<b>217.8</b>	<b>-</b>	<b>217.8</b>	<b>208.7</b>	<b>211.9</b>	<b>(5.9)</b>
<b>I-880/SR-92 Interchange Reconstruction</b>	<b>EA's 23317_, 01601_, and 01602_</b>						
Capital Outlay Support		28.8	26.2	55.0	42.2	55.0	-
Capital Outlay Construction							
BATA Funding		85.2	60.2	145.4	37.9	145.4	-
Non-BATA Funding		9.6	-	9.6	-	9.6	-
Subtotal		94.8	60.2	155.0	37.9	155.0	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.0	16.9	-
Project Reserves		0.3	17.8	18.1	-	18.1	-
<b>Total</b>		<b>133.8</b>	<b>111.2</b>	<b>245.0</b>	<b>91.1</b>	<b>245.0</b>	<b>-</b>
<b>Bayfront Expressway Widening</b>	<b>EA's 00487_, 01511_, and 01512_</b>						
Capital Outlay Support		8.6	(0.3)	8.3	8.3	8.2	(0.1)
Capital Outlay Construction		26.5	-	26.5	24.9	26.5	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	0.3	1.1	-	1.1	-
<b>Total</b>		<b>36.1</b>	<b>-</b>	<b>36.1</b>	<b>33.4</b>	<b>36.0</b>	<b>(0.1)</b>
<b>US 101/University Avenue Interchange Modification</b>	<b>Non-Caltrans</b>						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		3.8	-	3.8	3.7	3.8	-
<b>Total</b>		<b>3.8</b>	<b>-</b>	<b>3.8</b>	<b>3.7</b>	<b>3.8</b>	<b>-</b>
<b>Subtotal BATA Capital Outlay Support</b>		<b>358.3</b>	<b>55.0</b>	<b>413.3</b>	<b>390.1</b>	<b>412.6</b>	<b>(0.7)</b>
<b>Subtotal BATA Capital Outlay Construction</b>		<b>1,569.8</b>	<b>231.0</b>	<b>1,800.8</b>	<b>1,613.4</b>	<b>1,785.8</b>	<b>(15.0)</b>
<b>Subtotal Capital Outlay Right-of-Way</b>		<b>42.5</b>	<b>6.9</b>	<b>49.4</b>	<b>38.5</b>	<b>48.5</b>	<b>(0.9)</b>
<b>Subtotal Non-BATA Capital Outlay Support</b>		<b>14.0</b>	<b>1.2</b>	<b>15.2</b>	<b>16.7</b>	<b>17.0</b>	<b>1.8</b>
<b>Subtotal Non-BATA Capital Outlay Construction</b>		<b>92.4</b>	<b>9.5</b>	<b>101.9</b>	<b>82.9</b>	<b>101.9</b>	<b>-</b>
<b>Project Reserves</b>		<b>35.6</b>	<b>20.2</b>	<b>55.8</b>	<b>-</b>	<b>50.6</b>	<b>(5.2)</b>
<b>Total RM1 Program</b>		<b>2,112.6</b>	<b>323.8</b>	<b>2,436.4</b>	<b>2,141.6</b>	<b>2,416.4</b>	<b>(20.0)</b>

## Notes:

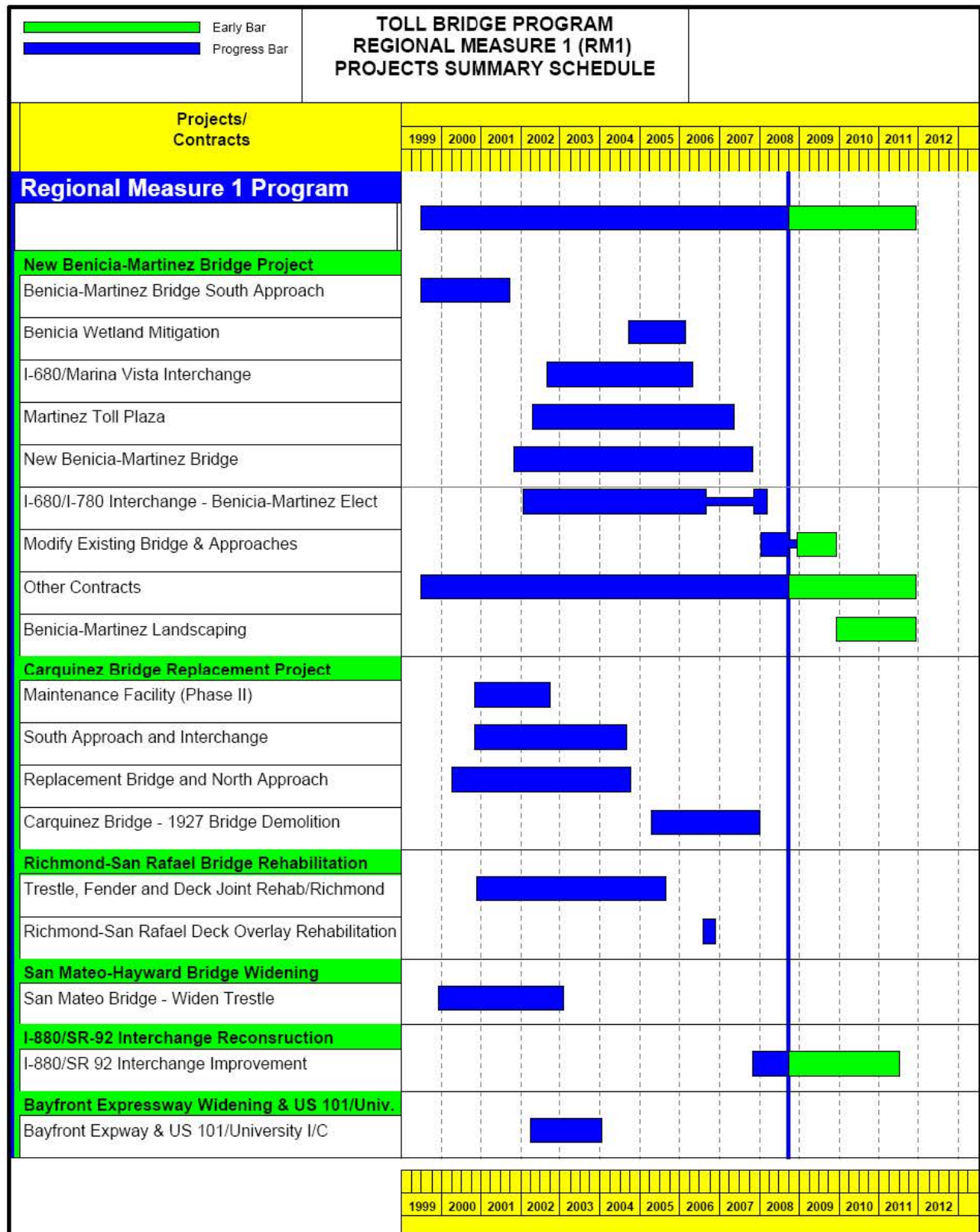
<sup>1</sup> Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U\_ and 04157\_

<sup>2</sup> San Mateo-Hayward Bridge Widening Includes EA's 00305\_, 04501\_, 04502\_, 04503\_, 04504\_, 04505\_, 04506\_, 04507\_, 04508\_, 04509\_, 27740\_, 27790\_, 04860\_

Note: Details may not sum to totals due to rounding effects.



## Appendix I: Regional Measure 1 Program Summary Schedule



## Appendix J: Glossary of Terms

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**AB144/SB 66 BUDGET:** The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

**BATA BUDGET:** The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

**APPROVED CHANGES:** For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

**CURRENT APPROVED BUDGET:** The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

**COST TO DATE:** The actual expenditures incurred by the program, project or contract as of the month and year shown.

**COST FORECAST:** The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

**AT COMPLETION VARIANCE or VARIANCE (cost):** The mathematical difference between the Cost Forecast and the Current Approved Budget.

**AB 144/SB 66 PROJECT COMPLETE BASELINE:** The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

**BATA PROJECT COMPLETE BASELINE:** The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

**PROJECT COMPLETE CURRENT APPROVED SCHEDULE:** The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

**PROJECT COMPLETE SCHEDULE FORECAST:** The current projected date for the completion of the program, project, or contract.

**SCHEDULE VARIANCE or VARIANCE (schedule):** The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

*The following information is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is \$1,574,873.73.*

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## **ITEM 4: PROGRESS REPORTS**

### **c. FHWA- Supplement to 2007 Annual Update**



## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 4c  
Item- Progress Reports  
FHWA - Supplement to 2007 Annual Update

---

**Recommendation:**  
**APPROVAL**

**Cost:**  
N/A

**Schedule Impacts:**  
N/A

**Discussion:**

TBPOC approval of the Supplement to the 2007 Annual Update submitted to the Federal Highway Administration (FHWA) is being requested. BATA's Finance Group is reviewing the FHWA supplement for consistency with BATA's Plan of Finance. BATA staff will provide their comment to the TBPOC at the November 6 meeting.

In December 2007, the California Department of Transportation issued the 2007 Annual Update to the Financial Plan of the East Span of the San Francisco-Oakland Bay Bridge (SFOBB) Seismic Safety Projects, as required by FHWA.

A supplement to the 2007 Annual Update was prepared in response to inquiries from Ms. Nancy Bobb, SFOBB Project Oversight Manager, FHWA. The supplement provides additional information and clarification on issues raised by FHWA, ranging from funding sources, use of federal funding, project schedule, cash flow, and contingency. The Supplement to the 2007 Annual Update and the 2007 Annual Update are included as attachments.

**Attachment(s):**

1. Supplement to 2007 Annual Update to the Financial Plan of the East Span of the San Francisco–Oakland Bay Bridge Seismic Safety Projects
2. FHWA 2007 Annual Financial Update

## Supplement to 2007 Annual Update to the Financial Plan of the East Span of the San Francisco–Oakland Bay Bridge Seismic Safety Project

This document supplements the California Department of Transportation's (Department) 2007 Annual Update to the Financial Plan of the East Span of the San Francisco–Oakland Bay Bridge (SFOBB) Seismic Safety Project and responds to the inquiries from Ms. Nancy Bobb, Bay Bridge Project Oversight Manager, Federal Highway Administration (FHWA). The inquiries and the responses are as follows:

- In the Program Funding and Financing section, Table 1 shows a Budgeted Total of \$8,685.0 million with Funding Available & Contributions of \$7,757.9 million. The finance plan states that the difference will be covered by scheduled future revenues. It appears that the majority of \$927 million difference is in the ITIP/SHOPP/Federal Contingency, the FHWA HBRR, the SHA-East Span Demolition, and the SHA-"Efficiency Savings" categories. We are having difficulty in finding where these are addressed. Can you give us more info?*

Response:

The difference of \$927.1 million in the Program Budget and the Funding Available and Contribution will come from the following sources:

Sources/Description	Future Scheduled Contribution	Future Contribution	Shortfall
Contribution from Proposition 192		\$ 1.0 million	
Contribution from Vincent Thomas Bridge (Shortfall)			\$8.1 million
AB 1171 Federal Highway Bridge Replacement and Rehabilitation	\$42 million		
AB 1171 Contingency	\$448 million		
AB 144 State Highway Account Efficiency Savings	\$128 million		
AB 144 State Highway Account for the demolition of the existing SFOBB East Span	\$300 million		
<b>Total</b>	<b>\$918 million</b>	<b>\$1.0 million</b>	<b>\$8.1 million</b>

The information on the schedule of contribution for the \$918 million is illustrated in Table 3 - Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (TBSRP), 2007 Annual Update to the Financial Plan of the SFOBB East Span Seismic Safety Project.

The final \$1 million from the budgeted Proposition 192 contribution will become available to the TBSRP upon allocation by the California Transportation Commission (CTC). The Department plans to request the final \$1.0 million Proposition 192 allocation at an upcoming CTC meeting. The remaining \$8.1 million budgeted contribution from the Vincent Thomas Bridge (VTB) is not available. When funds from the VTB account were transferred to the TBSRP, the VTB account was short \$8.1 million. Therefore, the TBSRP has an \$8.1 million shortfall.

- *Please clarify what funding is actually included in the ITIP/SHOPP/Federal Contingency. If there are federal funds being included in that portion on future contracts, those contracts will be federalized. If there are no federal funds included in this funding, perhaps it would be better to call it something else to avoid future confusion.*

Response:

AB 1171, Section 188.5 (b)(8)(B) describes the “ITIP/SHOPP/Federal Contingency contribution in Table 1 as such that

*“.... The department may program not more than four hundred forty-eight million dollars (\$448,000,000) in project savings or other available resources from the Interregional Transportation Improvement Program, the State Highway Operation and Protection Program, or federal bridge funds for that purpose.”*

The assembly bill identified that any of these funds could be used for the “contingency.” However, it has been scheduled as SHOPP funding for a number of years. It is currently scheduled as SHOPP funding in the 2008 Fund Estimate. There is no federal fund included in this contingency item.

- *The text indicates opening to EB traffic in 2013, but Table 5 indicates YBI/OTD completion in Nov. 2014, which has the appearance of a discrepancy. If a substantial amount of work continues beyond traffic opening, we would prefer that the text indicate that.*

Response:

The opening of the new westbound (WB) and eastbound (EB) of the SFOBB East Span involves three segments: Yerba Buena Island Transition Structure (YBITS), Self-Anchored Suspension Span (SAS), and Oakland Touchdown (OTD). These three segments are being built and administered by three separate contracts with different construction completion dates. However, the work in these three contracts has to be completed simultaneously for opening to traffic. This milestone has been established as opening to traffic.

The current TBPOC-approved schedule for opening to traffic in the WB direction is in September 2012 and in March 2013 for the EB direction. After the opening-to-traffic milestone has been achieved, these contractors still have other work to perform before their contracts are complete. All three contracts have work to complete after opening to traffic. For the OTD 2 contract, construction activities are to remove the portion of the upper and lower decks of the existing bridge between Bents 23 and 28; to remove the EB Route detour (built under OTD 1 Contract); to construct the remaining portion of the bike path and Caltrans Maintenance road; to remove the temporary Maintenance Road; to construct the temporary parking lot; and lastly, to landscape the OTD area. These remaining activities will take approximately over a year to complete. The OTD 2 contract is scheduled to be completed in November 2014.

- *Since demo won't be completed until 2015, essentially completing the overall project, the cash flow diagram in Table 4 should extend to 2015. Since demo won't be completed until 2015, essentially completing the overall project, the cash flow diagram in Table 4 should extend to 2015.*

#### Responses:

BATA has revised the Pro Forma Financial Projections statement forecasting the financial operations and results for FY 2008 to 2017. The revised Pro Forma Financial Projection statement as of May 2008 has been attached.

**DEPARTMENT OF TRANSPORTATION**

OFFICE OF THE DIRECTOR

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*Flex your power!  
Be energy efficient!*

December 13, 2007

Mr. Gene Fong, Division Administrator  
Federal Highway Administration - California Division  
650 Capitol Mall, Suite 4-100  
Sacramento, CA 95814

Dear Mr. Fong:

The California Department of Transportation is pleased to submit the final 2007 Annual Update to the Finance Plan for the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project. This update is submitted in accordance with the requirements of Section 1305(b) of the Transportation Efficiency Act for the 21<sup>st</sup> Century, including the required Letter of Certification. Additionally, included is Attachment 1, the Toll Bridge Seismic Retrofit Program Report – Third Quarter Report, September 2007.

Please feel free to contact Tony Anziano, Toll Bridge Program Manager, at (415) 310-4507 or via email at [Tony\\_Anziano@dot.ca.gov](mailto:Tony_Anziano@dot.ca.gov), if you have any questions or need additional information.

Sincerely,

A blue ink signature of Will Kempton, written in a cursive style.

WILL KEMPTON  
Director

Attachments

c: Tony Anziano



Mr. Gene Fong  
December 13, 2007  
Page 2

bc: Brenda Bryant, FHWA

Steve Heminger, Executive Director Metropolitan Transportation Commission (MTC)  
John Barna, Executive Director, California Transportation Commission (CTC)  
Andrew Fremier, Deputy Executive Director, Bay Area Toll Authority, MTC  
Stephen Maller, Deputy Director, CTC  
Randy Iwasaki, Chief Deputy Director  
Richard Land, Chief Engineer  
Cindy McKim, Chief Financial Officer  
Bijan Sartipi, Deputy Director, District 4  
Brian Maroney, Deputy Toll Bridge Program Manager  
Ken Terpstra, Project Manager  
Jon Tapping, SFOBB Project Risk Management Coordinator  
Fardad Falakfarsa, Chief, Federal Resources Office, DoB  
Norma Ortega, Chief, Division of Budgets (DoB)  
Weijian Ni, DoB  
Jeffrey Ingles, DoB  
Pochana Chongchaikit, Toll Bridge Resource & Capital Management

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**LETTER OF CERTIFICATION**

The California Department of Transportation (Department) has developed a comprehensive Financial Plan for the San Francisco-Oakland Bay Bridge (SFOBB) Seismic Retrofit Project in accordance with the requirements of Section 106, Title 23, and the Financial Plan guidance issued by the Federal Highway Administration (FHWA). The plan provides detailed cost estimates to complete the project and the estimates of financial resources to be utilized to fully finance the project.

The cost data in the Financial Plan provides an accurate accounting of costs incurred to date and includes a realistic estimate of future costs based on engineer's estimates and expected construction escalation factors. The estimates of financial resources are based on realistic sources of funds for the project, as authorized by State Legislation under Chapter 71, Statutes of 2005 (Assembly Bill 144).

To the best of our knowledge and belief, the Financial Plan, as submitted herewith, fairly and accurately presents the financial position of the SFOBB Seismic Retrofit Project as of September 30, 2007. The funding options in the Financial Plan are based upon the action taken by the Legislature, our judgment of the expected project conditions, and our expected course of action. We believe that the assumptions underlying the Financial Plan are realistic and appropriate. Furthermore, we have made available all significant information that we think is relevant to the Financial Plan, and to the best of our knowledge and belief, the documents and records supporting the assumptions are appropriate.

A handwritten signature in blue ink that reads "Will Kempton".

WILL KEMPTON  
Director

12-13-07

Date

## **2007 ANNUAL UPDATE TO THE FINANCE PLAN OF THE SAN FRANCISCO – OAKLAND BAY BRIDGE EAST SPAN SEISMIC SAFETY PROJECT**

This annual update is submitted by the California Department of Transportation (Department) in accordance with the requirements of Section 1305 (b) of the Transportation Efficiency Act for the 21st Century, and Title 23 United States Code, Section 106 (h).

### **Introduction and Summary**

The San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Safety Project (ESSSP) is part of the \$8.685 billion Toll Bridge Seismic Retrofit Program (TBSRP). The TBSRP was established to finance the retrofit or replacement of seven state-owned toll bridges. The funding plan for the TBSRP was established by Senate Bill (SB) 60 in 1997, Assembly Bill (AB) 1171 in 2001, and AB 144/SB 66 in 2005.

AB 144 established a comprehensive financial plan for the TBSRP, including the consolidation and financial management of all toll revenues collected on the state-owned toll bridges in the San Francisco Bay Area under the jurisdiction of the Bay Area Toll Authority (BATA). The bill provides \$630 million in additional state funds and authorizes BATA to increase tolls on the Bay Area state-owned toll bridges by at least an additional \$1.00 on January 1, 2007 to provide adequate funding to complete the TBSRP.

In addition, AB 144 and SB 66 significantly strengthen the program and project oversight activities for the TBSRP. The bills created the Toll Bridge Program Oversight Committee (TBPOC) to implement project oversight and control processes for the TBSRP. The TBPOC is comprised of the Director of the Department of Transportation (Caltrans), the Executive Director of BATA, and the Executive Director of the California Transportation Commission (CTC). The TBPOC's program oversight activities include review and approval of contract bid documents, review and resolution of project issues, evaluation and approval of contract change orders and claims, and the issuance of monthly and quarterly progress reports.

Under AB 144, the baseline budget to retrofit or replace the seven state-owned toll bridges was set at \$7.785 billion and a \$900 million program contingency, for a total program budget of \$8.685 billion. The bill reaffirms the self-anchored suspension design for the SFOBB East Span connector. The budgeted total program costs and the funding sources remain unchanged from AB 144.

The finance plan outlined in this annual update includes fund sources for the entire TBSRP, including the \$900 million program contingency. The only bridge remaining to be completed in the TBSRP is the SFOBB (ESSSP and West Approach Seismic Retrofit). Some of the seismic work on the completed bridges was accomplished at less cost than budgeted. These savings are available to augment the program contingency. Currently, \$89 million in savings has been realized from the Richmond-San Rafael Bridge Seismic Retrofit project which was completed in October 2005.



## Program Funding and Financing

AB 144 established a funding level of \$8.685 billion for the TBSRP. The entire program will be financed through a combination of toll revenues, federal, state and local funds. *Table 1. Program Budgeted Funding Sources* details the funding sources.

Table 1. Program Budgeted Funding Sources as of September 30, 2007 (\$ in Millions)

	Budgeted	Funding Available & Contributions
<b>Financing</b>		
Seismic Surcharge Revenue AB 1171	\$2,282.0	\$2,282.0
Seismic Surcharge Revenue AB 144	\$2,150.0	\$2,150.0
BATA Consolidation	\$820.0	\$820.0
<b>Subtotal - Financing</b>	<b>\$5,252.0</b>	<b>\$5,252.0</b>
<b>Contributions</b>		
Proposition 192	\$790.0	\$789.0
San Diego Coronado Toll Bridge Revenue Fund	\$33.0	\$33.0
Vincent Thomas Bridge	\$15.0	\$6.9
State Highway Account <sup>(1)(2)</sup>	\$745.0	\$745.0
Public Transportation Account <sup>(1)(3)</sup>	\$130.0	\$130.0
ITIP/SHOPP/Federal Contingency	\$448.0	\$0.0
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	\$642.0	\$600.0
SHA - East Span Demolition	\$300.0	
SHA - "Efficiency Savings" <sup>(4)</sup>	\$130.0	\$2.0
Redirect Spillover	\$125.0	\$125.0
Motor Vehicle Account	\$75.0	\$75.0
<b>Subtotal - Contributions</b>	<b>\$3,433.0</b>	<b>\$2,505.9</b>
<b>Total Funding</b>	<b>\$8,685.0</b>	<b>\$7,757.9</b>
<b>Allocated to date</b>		<b>\$6,369.7</b>
<b>Remaining Unallocated</b>		<b>\$1,388.2</b>

<sup>(1)</sup> The California Transportation Commission adopted a new schedule and changed the PTA/SHA split on December 15, 2005.

<sup>(2)</sup> To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.

<sup>(3)</sup> To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.

<sup>(4)</sup> To date, \$2 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" for 2005-06 identified under AB 144. Approximately \$128 million remains to be distributed as scheduled by the CTC.

### Notes:

Program budget includes \$900 million program contingency.

**Funding Status**

Of the \$8.685 billion budgeted for the TBSRP, \$6.37 billion has been expended or encumbered as of September 30, 2007. The difference between the total of expenditures and encumbrances and the total of revenues and transfers will be covered by scheduled future revenues. The program's financial status of revenues and expenditures and encumbrances is summarized in *Table 2. Toll Bridge Seismic Retrofit Program Financial Status*. The figures include the surcharge revenues collected, transfers from the State Highway Account (SHA) and the Public Transportation Account (PTA), revenue from the Seismic Retrofit Bond of 1996 (Proposition 192), and expenditures and encumbrances from the Toll Bridge Seismic Retrofit Account (TBSRA). Through September 2005, \$789 million provided by Proposition 192 has been allocated by the CTC.



Table 2. Toll Bridge Seismic Retrofit Program Financial Status as of September 30, 2007(\$ Millions)\*

<b>Toll Bridge Seismic Retrofit Program Financial Status</b> <b>As of September 30, 2007</b> (Dollars in Millions)	
<b>Revenues:</b>	
Toll Surcharge <sup>(1)</sup>	\$687.9
SMIF Interest	\$97.9
Bond Revenue (Seismic Bond of 1996)	\$789.0
Bond Revenue (Toll Revenue Bonds)	\$1,062.0
Commercial Paper <sup>(2)</sup>	\$80.0
SANDAG	\$33.0
Vincent Thomas <sup>(3)</sup>	\$6.9
Federal Highway Bridge Replacement and Rehabilitation	\$600.0
<b>Transfers to TBSRA:</b>	
Motor Vehicle Account	\$75.0
State Highway Account <sup>(4)</sup>	\$745.0
Public Transportation Account <sup>(5)</sup>	\$90.0
State Highway Account "Efficiency Savings" <sup>(6)</sup>	\$2.0
Total Revenues and Transfers	<b>\$4,268.7</b>
<b>Expenditures:</b>	
Capital Outlay	\$3,626.9
State Operations	\$1,003.3
Total Expenditures	<b>\$4,630.2</b>
<b>Encumbrances:</b>	
Capital Outlay	\$1,722.9
State Operations	\$16.6
Total Encumbrances	<b>\$1,739.5</b>
<b>Total Expenditures and Encumbrances</b>	<b>\$6,369.7</b>

(1) The Toll Surcharge is dedicated to repayment of bonds beginning September 1, 2003. Toll Surcharge shown here is only toll revenue collected prior to that date.

(2) \$80 Million in Commercial Paper issued on or about April 5, 2005.

(3) No additional funding is expected from the Vincent Thomas Toll Revenue

(4) To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.

(5) To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.

(6) To date, \$2 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" for 2005-06 identified under AB 144. Approximately \$128 million remains to be distributed as scheduled by the CTC.

\* From Third Quarter 2007 TBSRP Report

As shown in Table 3. *Schedule of Contributions to the Toll Bridge Seismic Retrofit Program*, in December 2005, the CTC adopted the revised schedule for the transfer of funds to allow BATA to pledge state fund contribution to the financing of the TBSRP per BATA's adopted finance plan.

Table 3. Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (\$ in Millions)

Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
AB 1171	SHA	290									290
	PTA	80	40								120
	HBRR	100	100	100	42						342
	Contingency				1	99	100	100	148		448
AB 144	SHA*	2	8				53	50	17		130
	MVA	75									75
	Spillover		125								125
	SHA**									300	300
Total		547	273	100	43	99	153	150	165	300	1830

\* Caltrans efficiency savings

\*\* SFOBB East Span demolition cost

### Program Financing and Cash Flow Projections

AB 144 consolidated the administration of all toll revenues collected on the state-owned Bay Area toll bridges and financing of the TBSRP under the jurisdiction of the BATA. BATA has direct programmatic responsibilities for the administration of all toll revenues collected on the state-owned bridges in the Bay Area and responsibilities for financial management of the TBSRP, including:

- Administrative responsibility for collection and accounting of all toll revenues.
- Authorization to increase tolls on the state-owned bridges by \$1.00, effective no sooner than January 1, 2007.
- Project level toll setting authority as necessary to cover additional cost increases beyond the funded \$900 million program contingency in order to complete the toll bridge seismic retrofit program.
- Assumption of funding all of the roadway and bridge structure maintenance from Caltrans once bridge seismic retrofit projects are completed.

In accordance with its responsibilities provided under the law, in September 2005, BATA adopted a finance plan for the TBSRP. The major components of the finance plan include:

- Issuing \$6.2 billion in debt, including defeasance of \$1.5 billion in outstanding State Infrastructure Bank bonds and commercial paper;



- Increasing tolls on the state-owned bridges by \$1.00 (from \$3.00 to \$4.00 for two-axle vehicles), effective January 1, 2007;
- Securing the maximum amount of state funding early in the construction schedule to most efficiently use toll funds (see discussion below); and,
- Locking in historically low interest rates to the extent possible in order to improve the chances that the entire toll program construction and the operations and maintenance can be delivered within the \$4.00 auto toll level.

In September 2005, BATA approved a Finance Plan for the TBSRP and other toll bridge improvement programs dependent on toll revenues from the state-owned bridges. The finance plan calls for \$6.2 billion in new debt issuances, including defeasance of the existing outstanding I-Bank bonds. Consistent with the finance plan, in December 2005, BATA approved the issuance of up to \$1.0 billion of 2006 toll bridge revenue bonds. The bond issuance will provide adequate cash flow to fund the SAS contract for the ESSSP, which was awarded on May 3, 2006.

Furthermore, in March 2006, BATA approved the issuance of \$1.3 billion in bonds to defease the I-Bank bonds approved in October 2005. Additionally, pursuant to the law, BATA held two public hearings, one in October and one in November 2005, to receive public testimony regarding the proposed \$1.00 seismic surcharge toll increase beginning on January 1, 2007 on the state-owned toll bridges in the Bay Area. BATA approved the toll increase on January 25, 2006.

Furthermore, SB 66, enacted on September 29, 2005, appropriates \$75 million of specified Motor Vehicle Account funds and \$125 million of other specified state funds for state-owned toll bridges in the Bay Area. These funds have already been transferred to the Toll Bridge Seismic Retrofit Account.

Additionally, the following pro forma financial statement projects the financial operations and results for BATA for fiscal years 2008-2013. See *Table 4. BATA Pro Forma Financial Projections*.

Table 4. BATA Pro Forma Financial Projections

<i>Bay Area Toll Authority Pro Forma Financial Projections (\$ in Thousands) Updated: September 30, 2007</i>						
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
<b>Operating Revenue</b>						
Toll Revenue	\$ 486,140	\$ 487,751	\$ 489,369	\$ 490,996	\$ 492,631	\$ 495,094
Interest Income	141,352	98,180	58,457	51,311	58,140	53,806
<b>Total Operating Revenue</b>	<b>\$ 627,492</b>	<b>\$ 585,931</b>	<b>\$ 547,826</b>	<b>\$ 542,307</b>	<b>\$ 550,771</b>	<b>\$ 548,900</b>
<b>Operating Expenses</b>						
Other Operating Expenses*	\$ (71,234)	\$ (75,208)	\$ (76,045)	\$ (76,900)	\$ (77,772)	\$ (78,758)
Toll Operating Expenses	(57,775)	(58,993)	(60,763)	(63,086)	(69,183)	(71,243)
<b>Total Operating Expenses</b>	<b>\$ (129,009)</b>	<b>\$ (134,201)</b>	<b>\$ (136,808)</b>	<b>\$ (139,986)</b>	<b>\$ (146,955)</b>	<b>\$ (150,001)</b>
<b>Net Before Debt Service</b>	<b>\$ 498,483</b>	<b>\$ 451,730</b>	<b>\$ 411,018</b>	<b>\$ 402,321</b>	<b>\$ 403,816</b>	<b>\$ 398,899</b>
<b>Debt Service</b>	<b>(223,676)</b>	<b>(234,703)</b>	<b>(234,398)</b>	<b>(254,997)</b>	<b>(282,943)</b>	<b>(298,577)</b>
<b>Net Operating Revenue</b>	<b>\$ 274,807</b>	<b>\$ 217,027</b>	<b>\$ 176,620</b>	<b>\$ 147,324</b>	<b>\$ 120,873</b>	<b>\$ 100,322</b>
<b>State Contribution (AB144/SB66)</b>						
SHA **		\$ 1,000	\$ 99,000	\$ 100,000	\$ 100,000	\$ 148,000
HBRR **	100,000	42,000				
<b>Total State Contribution</b>	<b>\$ 100,000</b>	<b>\$ 43,000</b>	<b>\$ 99,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 148,000</b>
<b>Debt Proceeds</b>			-	750,000	700,000	250,000
<b>Total Non Operating Revenue</b>	<b>\$ 100,000</b>	<b>\$ 43,000</b>	<b>\$ 99,000</b>	<b>\$ 850,000</b>	<b>\$ 800,000</b>	<b>\$ 398,000</b>
<b>TBSRP Expenses</b>						
SAS	\$ (383,847)	\$ (520,849)	\$ (345,747)	\$ (174,114)	\$ (158,875)	\$ (81,415)
Remainder of TBSRP	(567,569)	(301,358)	(160,051)	(193,933)	(306,673)	(319,385)
<b>Total TBSRP Expenses</b>	<b>\$ (951,416)</b>	<b>\$ (822,206)</b>	<b>\$ (505,798)</b>	<b>\$ (368,047)</b>	<b>\$ (465,547)</b>	<b>\$ (400,800)</b>
<b>Beginning Balance</b>	<b>\$ 2,982,523</b>	<b>\$ 2,476,220</b>	<b>\$ 1,914,040</b>	<b>\$ 1,683,862</b>	<b>\$ 2,313,139</b>	<b>\$ 2,768,465</b>
<b>Total Net Income</b>	<b>(576,609)</b>	<b>(562,179)</b>	<b>(230,178)</b>	<b>629,277</b>	<b>455,326</b>	<b>97,522</b>
<b>Transfers</b>	<b>70,306</b>					
<b>Ending Fund Balance</b>	<b>\$ 2,476,220</b>	<b>\$ 1,914,040</b>	<b>\$ 1,683,862</b>	<b>\$ 2,313,139</b>	<b>\$ 2,768,465</b>	<b>\$ 2,865,987</b>

**Base Assumptions:****Revenue Assumptions**

Total Growth Rate	0.50%
Bay Bridge	0.00%
All Other Bridges	0.50%

**Interest Earnings Assumptions**

Floating Rate Bonds	3.41%
Fund Balance Earnings	5.06%

**Expenses**

Operating and Maintenance	3.5%
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\*MTC to BATA transfers

\*\* CTC adopted pmt schedule

Contingency

HBRR

## Project Description

The SFOBB ESSSP will be seismically retrofitted through the complete replacement of the existing span. The project includes construction of the Skyway portion of the bridge, which consists of two parallel concrete structures, each approximately 1.3 miles in length; an SAS bridge consisting of a 510-foot tower supporting a bridge deck connecting the Skyway to Yerba Buena Island Transition Structures (YBITS) on YBI and on the east end of the bridge connecting the bridge to the toll plaza area, and demolition of the existing east span.

The SFOBB ESSSP now consists of 21 contracts. Construction of the Oakland Touchdown (OTD) Approach Structures and the YBITS has been split into multiple contracts to facilitate construction flow and to accelerate some elements of work off the critical path for the completion of the new east span.

## Current Status

The current 21 contracts for SFOBB ESSSP are identified below:

Nine contracts are **complete**:

- Interim Retrofit (Existing Bridge)
- East Span Retrofit (Existing Bridge)
- Pile Installation Demonstration
- OTD Geofill
- YBI Archaeology
- United States Coast Guard (USCG) Road Relocation on YBI
- SAS Land Foundations (W2)
- YBI Electrical Substation
- OTD Submarine Cable

Six contracts are under **construction**:

- Skyway (98 percent complete)
- South/South Detour (61 percent complete)
- SAS Marine Foundations (E2/T1) (89 percent complete)
- SAS (21 percent complete)
- Stormwater Treatment Measures (92 percent complete)
- OTD Contract 1 was awarded in July 2007.

Six contracts are in **design**:

- OTD Contract 2 (construct eastbound superstructure, landscaping, and maintenance road). The contract is planned to be advertised in summer 2010.
- OTD Portions of the Corridor Electrical Contract: This scope may be executed as a separate contract, or alternatively, may be included within OTD Contract 2 and/or the other contracts within the east span corridor.
- YBITS No.1 (design 90 percent complete to date)



- YBITS No.2 (design 80 percent complete to date)
- YBITS No.3 Landscape contract
- Existing Bridge Demolition design (10 percent complete to date).

### Project Timeline/Implementation Plan

The current schedule anticipates that the new westbound SFOBB East Span will be open to traffic by 2012 and the eastbound Span by 2013. TBPOC has challenged the project team to accelerate the delivery of the SAS contract; thereby, the delivery of the TBSRP. Demolition of the existing east span is scheduled to be completed in 2015. See *Table 5. SFOBB ESSSP Baseline and Projected Schedule Summary*.

Table 5. SFOBB ESSSP Baseline and Projected Schedule Summary

Contract	AB 144/SB 66 Baseline Project Completion Date	Approved Changes	Current Approved Schedule	3rd Quarter 2007 Forecast Project Completion Date	Variance (Months)
Skyway	Apr-07	8	Dec-07	Dec-07	-
YBI South / South Detour	Jul-07	36	Jun-10	Jun-10	-
Stormwater Treatment Measures	Mar-08	-	Mar-08	Mar-08	-
SAS E2/T1 Foundations	Jun-08	(3)	Mar-08	Mar-08	-
Open to Traffic: Westbound	Sep-11	12	Sep-12	Sep-12	-
SAS Superstructure	Mar-12	12	Mar-13	Mar-13	-
Open to Traffic: Eastbound	Sep-12	12	Sep-13	Sep-13	-
Oakland Touchdown	Nov-13	12	Nov-14	Nov-14	-
◆ OTD Submarine Cable	N/A		Jan-08	Jan-08	-
◆ OTD Westbound	N/A		Jan-10	Jan-10	-
◆ OTD Eastbound	N/A		Nov-14	Nov-14	-
YBI Transition Structures	Nov-13	12	Nov-14	Nov-14	-
Existing Bridge Demolition	Sep-14	12	Sep-15	Sep-15	-

*Note: The new east span forecast to be fully open to traffic in September 2013. Construction activities will continue beyond that date to complete the project, including demolition of the existing structure.*

It should be noted that the schedules shown do not at this time include the potential near “worst-case” issues that may affect the schedule identified in the SFOBB ESSSP Risk Management Plan.

For additional information regarding the Implementation Plan, please refer to Attachment 1, Third Quarter 2007 TBSRP Report.

## **Cost Estimate**

### **TBSRP Reporting**

The Department, together with the Toll Bridge Program Oversight Committee (TBPOC), uses three primary measures to monitor and report the financial status of the San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Safety Project (ESSSP): the Baseline Budget established by California Assembly Bill 144 of 2005, the current TBPOC Approved Budget, and the current Forecast Cost.

### **Baseline Budget**

The budget established when AB 144 became law in July 2005 was the baseline budget.

### **Forecast Cost**

The TBSRP forecast cost at completion depends on the quality of plans, contractor's performances, construction administration and effectiveness of implementing risk mitigation measures. Consequently, the Department has undertaken a probabilistic assessment of the expected program cost at completion. Quantitative cost risk analyses associated with TBSRP Capital Outlay (CO) and Capital Outlay Support (COS) are reported in the Quarterly Risk Management Report (QRMR) and considered in the TBPOC's cost forecasts.

### **Cost History**

The AB 144/SB 66 baseline budget for the SFOBB ESSSP was \$5.487 billion with \$959.4 million in COS. As of this report, the TBPOC approved budget changes to some of the SFOBB ESSSP contracts. The TBPOC current approved budget was \$5.666 billion, an increase of \$179.2 million in CO. The Third Quarter 2007 forecast of the SFOBB ESSSP was \$5.675 billion. The increase can be funded by combination of the non-project specific cost for COS, other budgeted capital for CO and also from the program contingency. See *Table 6. Toll Bridge Seismic Retrofit Program, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, Cost History.*



Table 6. Toll Bridge Seismic Retrofit Program, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, Cost History.

**Toll Bridge Seismic Retrofit Program**  
**San Francisco-Oakland Bay Bridge East Span Seismic Safety Project**  
**Cost History (\$ in Millions)**

Contract	AB 144/ SB 66 Budget (2005)	Approved Changes	TBPOC Current Approved Budget	3rd Quarter 2007 Forecast	Variance
a	b	c	d = b + c	e	g = f - d
<b>Completed Projects</b>					
Benicia-Martinez	177.8		177.8	177.8	
Carquinez	114.2		114.2	114.2	
San Mateo-Hayward	163.5		163.5	163.5	
Vincent Thomas	58.5		58.5	58.5	
San Diego-Coronado	103.5		103.5	103.5	
SFOBB West Span	307.9		307.9	307.9	
Richmond-San Rafael	914.0	(89.0)	825.0	825.0	
<b>Ongoing Projects</b>					
SFOBB West Approach	429.0		429.0	429.0	
SFOBB East Span	5,486.6	179.2	5,665.8	5,674.7	8.9
Capital Outlay Support	959.4		959.4	977.1	17.7
Capital Outlay					
Skyway	1,293.0		1,293.0	1,293.0	
SAS Superstructure	1,753.7		1,753.7	1,767.4	13.7
SAS E2/T1 Foundations	313.5		313.5	313.5	
YBI South/South Detour	131.9	202.5	334.4	334.4	
<b>YBI Structures</b>	<b>299.3</b>	<b>(23.2)</b>	276.1	276.1	
YBITS 1				214.3	
YBITS 2				58.5	
YBITS 3				3.3	
Oakland Touchdown	283.8		283.8	302.5	18.7
OTD Submarine Cable				9.6	
OTD Westbound				226.5	
OTD Eastbound				62.0	
OTD Electrical Systems				4.4	
Existing Bridge Demolition	239.2		239.2	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	18.3	
East Span Completed Projects	90.3		90.3	90.3	
<b>Right-of-Way and Environmental Mitigation</b>	<b>72.4</b>		<b>72.4</b>	<b>72.4</b>	
Other Budgeted Capital	35.1	(3.3)	31.8	7.7	(24.1)
Miscellaneous Program Costs	30.0		30.0		
<b>Subtotal</b>	<b>7,785.0</b>	<b>90.2</b>	<b>7,875.2</b>	<b>7,884.1</b>	<b>(8.9)</b>
Program Contingency	900.0	(90.2)	809.8	800.9	8.9
<b>TOTAL</b>	<b>8,685.0</b>	<b>-</b>	<b>8,685.0</b>	<b>8,685.0</b>	<b>-</b>

*Note: Details may not sum to totals due to rounding effects.*



## Summary of Significant Cost Change

The TBSRP Quarterly Report includes a discussion of the status of TBSRP projects and financial information consisting of baseline costs and forecast costs. The TBSRP Quarterly Report currently includes a textual discussion of risk and the adequacy of Program Contingency provided by Risk Management. Quantitative data about risks is not currently reported in the TBSRP Quarterly Report.

Caltrans continuously evaluates project and contract cost forecasts. The forecast as of September 30, 2007, includes revised forecasts from the AB 144/SB 66 baseline budget and TBPOC approved budget, and is as follows:

- The total Capital Outlay Support forecast of \$977.1 million for the SFOBB ESSSP is the same as last reported in the 2006 annual update. However, there were COS budget adjustments among a few contracts within the SFOBB ESSSP. These adjustments were approved by TBPOC and did not change the total budgeted COS for the SFOBB ESSSP.
- A forecast \$13.7 million increase for the SAS Superstructure contract to cover actions taken to encourage additional bidders for the project, including the bidder's stipend for the lowest three responsive bidders.
- A forecast of \$302.5 million for OTD, a net CO increase of \$18.7 million from the AB 144/SB 66 baseline budget was reported for OTD. The revised budget was due to cost increase for the OTD Contract No. 1. TBPOC approved the change when the contract was ready to be advertised. The contract was awarded in July 2007 and the construction allotment was \$209.4 million. The COS for the contract was increased to cover the additional work to split the contract and to administer four separate contracts over a longer duration rather than the original single contract. The increase was included in the total COS of \$977.1 million.
- In March 2007, the TBPOC approved a number of changes to the YBI South/South Detour (SSD) contract to better integrate the detour work into the current project schedule and to reduce overall project risks by advancing YBITS foundation work into the SSD contract. These changes increased the SSD contract budget by \$202.5 million and decreased the YBITS contract by \$23.2 million. The net project increase will be funded from the existing program contingency and does not change the overall TBSRP budget.
- The Bridge Demolition Contract is in the early design state (ten percent completion). The variance shown in Table 6 for this project was due to a re-evaluation of the cost escalation rates.

All of the variances discussed above can be funded from a combination of the non-project specific cost for COS, other budgeted capital for CO and also from the program contingencies.

For additional information, please refer to *Appendix B. TBSRP East Span Only AB 144/SB66 Baseline Budget, Forecasts, and Expenditures through September 30, 2007*, pages 32 and 33 of *Attachment 1. Third Quarter 2007 TBSRP Report*.

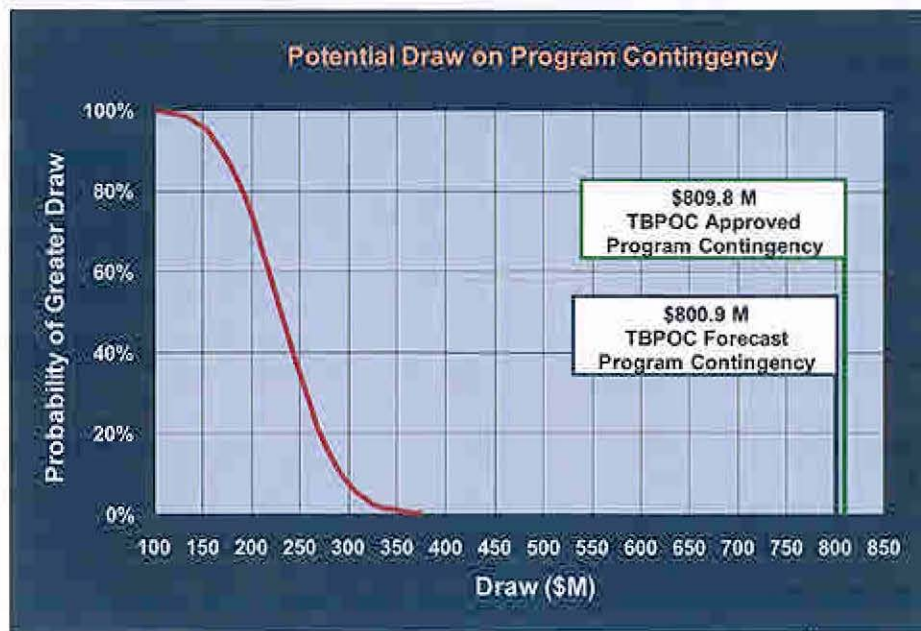
## SFOBB ESSSP Risk Management

Caltrans continues to implement comprehensive risk management on all SFOBB ESSSP contracts in accordance with AB 144. Currently, Caltrans and BATA have embarked on an initiative to manage risk jointly. Risk response efforts continue to focus on encouraging responsive bids for future contracts and mitigating the estimated cost and schedule impacts of identified risks. Updates of these risk management activities are included in *Attachment 1, Third Quarter 2007 TBSRP Report*, pages 25 and 26.

Cost and schedule risk management activities are ongoing for all contracts. The “bottom line” of cost risk analysis is whether the Program Reserve remains adequate to cover project risks. AB144 requires Caltrans to regularly assess the adequacy of the Program Reserve.

AB 144 set a \$900 million Program Reserve (also referred to as the Program Contingency). In late 2006, the Program Contingency was increased to \$989 million through the recovery of \$89 million from the Richmond-San Rafael Bridge retrofit project. With TBPOC approval of scope and budget changes for work on YBI, the Program Contingency is currently at \$809.8 million. See *Table 6. Toll Bridge Seismic Retrofit Program, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, Cost History*

The Potential Draw on Program Contingency is the amount by which the total project cost (capital outlay and capital outlay support) may exceed the TBPOC approved project budget. The potential draw on Program Contingency as of the 2<sup>nd</sup> quarter 2007 is shown in Figure 1.



**Figure 1 – Potential Draw on Program Contingency**

The potential draw for 2<sup>nd</sup> quarter 2007 ranges from about \$100 million to \$350 million, significantly less than the current \$809.8 million TBPOC Approved Program Contingency and the \$800.9 TBPOC Forecast Project Contingency. Ongoing risk mitigation actions are underway to reduce the potential call on the Program Contingency.



## Major Risk Issues

While risk identification, updating and mitigation activities are ongoing on all contracts in the project, Caltrans has identified six risk areas that are critical and formed focus teams to formulate and implement opportunity and risk response strategies in each of these areas.

### 1. *Self-Anchored Suspension (SAS) Tower and Deck Fabrication*

The Fabrication Focus Team (Team China) is evaluating the five main elements that might influence the SAS Bridge Fabrication at the Zhenhua Port Machinery Company in China. It is developing strategies to reduce risk and to accelerate fabrication while achieving the specified quality. The five elements identified are: Machines - as used during the fabrication cycle; Information - drawing release and fabrication methodology; Manpower - suitably qualified supervision, inspectors and welders; Materials - steel plate ordering, receipt and approval for use; Environment - foreseen difficulties with the outside climate and working in confined spaces.

### 2. *SAS Cable Installation*

While the SAS appears to have two cables, there is actually just one continuous main cable that is anchored within the decks at the eastern end where it ties into the Skyway orthotropic box girder sections. This cable is carried over the tower and wrapped around the two side-by-side decks at the western end. The Cable Installation Focus Team is developing strategies and solutions to mitigate potential risks: unique problems in attaining the required cable geometry; difficulties the Contractor may encounter in pulling the unique cable into place; compaction of the cable to the correct dimensions prior to the fitting of the cable bands; and complications during load transfer due to the unique three-dimensional geometry.

### 3. *SAS Barge Crane Procurement and Delivery*

The SAS Contractor is having difficulties with Federal agencies to get its Shearleg Barge Crane ("Barge Crane") "Coastwise" certified under the Federal Jones Act. Violation of the Act would make the Barge Crane non-Coastwise certified and ineligible to operate in U.S. waters. The Barge Crane is essential to SAS bridge construction and is on the critical path of the SAS schedule. Any change to the Contractor's current Barge Crane manufacturing and assembly plan may impact the project. The Barge Crane Focus Team is currently assessing alternative strategies.

### 4. *Corridor Mechanical/Electrical Systems Integration*

The mechanical/electrical/piping (MEP) systems include the traffic operations system, Supervisory Control and Data Acquisition system, and the 15 kV power distribution systems as well as longitudinal mechanical pipes which run the length of the bridge. MEP components are critical to the integrity of the ESSSP. MEP systems must ultimately be fully operational when the new structure is opened to traffic. The MEP Focus Team is developing strategies and solutions to mitigate potential risks related to the MEP systems. Key areas of potential risk have been identified: integrating electrical components from one end of the bridge to the other and who will perform the integration; verifying functionality and completeness of all MEP components; identifying the time frame for the construction of MEP components and by which contract; and ensuring MEP systems will function as designed at the completion of the project.

#### 5. *SAS Tower Erection*

The SAS steel tower will rise 525 feet above the water and will be installed on the T1 foundation. The tower is consist of four separate towers connected by shear link beams. These link beams are designed to move separately and to absorb energy generated during a major earthquake. Each of these four separated towers will be fabricated in 5 sections of varying lengths in China and transported by ship to the construction site in Oakland. There, the first section will be lowered over the 8 footing dowels and more than 400 high-strength rods already in place on the T1 footing, and the section will then be bolted down. The subsequent four sections will be attached along with the associated cross bracing and struts. The Tower Erection Focus Team is developing strategies and solutions to mitigate potential risks, including: T1 footing fabrication errors; template errors; footing installation errors; damage by others prior to erection; incorrect use of template at fabrication; mis-drilling of holes in the tower base; field dowel and rod installation errors; tower alignment tolerance issues; fit up problems with each tower section, cross bracing and struts; alignment and elevation adjustment problems; tower skirt plate problems; field welding issues; and bolted splice fit issues.

#### 6. *SAS Hinge Closure Construction*

The YBITS contract includes the construction of Hinge K that connects the YBITS to the SAS. The contract plans require a 90-day waiting period from prestressing of the YBITS superstructure to placement of the Hinge K closure pour. The intent of the 90-day requirement is to manage and control the impacts of creep and shrinkage to the extent possible to restrict the YBITS from loading the SAS. The Hinge Closure Focus Team is developing options to prevent the risk of delays to the project schedule due to the 90-day requirement. It is reviewing the relevant schedules, plans and specifications, and investigating the results of creep and shrinkage tests from the new Benicia Bridge and the Skyway contracts.

### **Summary**

The enactment of AB 144 provides the financing necessary to complete the TBSRP as quickly as possible. The bill required the Department and BATA to amend the cooperative agreement to incorporate certain oversight and control responsibilities of each agency. The bill also required the formation of a Toll Bridge Program Oversight Committee, comprised of the Director of the Department, the Executive Director of the BATA, and the Executive Director of the CTC.

All of these requirements have been met. In addition, AB 144 specifies BATA has financial control of the program while the Department has the responsibility for construction. The bill provides that any further cost increases must be paid by BATA.

BATA has the authority to increase tolls to fund these potential cost increases, if necessary. The bill gives BATA control of all three existing dollars and the new fourth dollar imposed on January 1, 2007.

The following attachment incorporated by reference to this annual update:

*Attachment 1. Toll Bridge Seismic Retrofit Program Report, Third Quarter ending September 30, 2007*



(in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Operating Revenue										
a Toll Revenue	\$ 486,140	\$ 487,751	\$ 489,369	\$ 490,996	\$ 492,631	\$ 495,094	\$497,569	\$500,057	\$502,557	\$505,070
b Interest Income	141,352	98,180	58,457	51,311	58,140	53,806	38,473	37,350	37,112	33,544
Total Operating Revenue	\$ 627,492	\$ 585,931	\$ 547,826	\$ 542,307	\$ 550,771	\$ 548,900	\$ 536,042	\$ 537,407	\$ 539,669	\$ 538,614
Operating Expenses										
c Other Operating Expenses*	\$ (71,234)	\$ (75,208)	\$ (76,045)	\$ (76,900)	\$ (77,772)	\$ (78,758)	\$ (79,763)	\$ (80,787)	\$ (81,830)	\$ (82,296)
d Toll Operating Expenses	(57,775)	(58,993)	(60,763)	(63,086)	(69,183)	(71,243)	(72,866)	(75,552)	(77,303)	(79,622)
Total Operating Expenses	\$ (129,009)	\$ (134,201)	\$ (136,808)	\$ (139,986)	\$ (146,955)	\$ (150,001)	\$ (152,629)	\$ (156,339)	\$ (159,133)	\$ (161,918)
Net Before Debt Service	\$ 498,483	\$ 451,730	\$ 411,018	\$ 402,321	\$ 403,816	\$ 398,899	\$ 383,413	\$ 381,068	\$ 380,536	\$ 376,696
e Debt Service	(223,676)	(234,703)	(234,398)	(254,997)	(282,943)	(298,577)	(307,069)	(318,764)	(345,411)	(349,807)
Net Operating Revenue	\$ 274,807	\$ 217,027	\$ 176,620	\$ 147,324	\$ 120,873	\$ 100,322	\$ 76,344	\$ 62,304	\$ 35,125	\$ 26,889
State Contribution (AB144/SB66)										
f CONTINGENCY **		\$ 1,000	\$ 99,000	\$ 100,000	\$ 100,000	\$ 148,000	\$ -	\$ -	\$ -	\$ -
EFFICIENCY SAVINGS**				\$ 53,000	\$ 50,000	\$ 17,000				
f HBRR **	100,000	42,000								
Total State Contribution	\$ 100,000	\$ 43,000	\$ 99,000	\$ 153,000	\$ 150,000	\$ 165,000	\$ -	\$ -	\$ -	\$ -
g Debt Proceeds			-	750,000	700,000	250,000		440,000	-	-
Total Non Operating Revenue	\$ 100,000	\$ 43,000	\$ 99,000	\$ 903,000	\$ 850,000	\$ 415,000	\$ -	\$ 440,000	\$ -	\$ -
TBSRP Expenses										
SAS	\$ (330,377)	\$ (432,321)	\$ (302,045)	\$ (150,458)	\$ (140,462)	\$ (101,581)	\$ -	\$ -	\$ -	\$ -
Remainder of TBSRP	(527,563)	(399,420)	(218,785)	(250,753)	(338,943)	(321,179)	(349,705)	(284,115)	(54,172)	-
Total TBSRP Expenses	\$ (857,940)	\$ (831,741)	\$ (520,830)	\$ (401,211)	\$ (479,405)	\$ (422,760)	\$ (349,705)	\$ (284,115)	\$ (54,172)	\$ -
Beginning Balance	\$ 2,982,523	\$ 2,476,220	\$ 1,584,532	\$ 902,455	\$ 1,033,367	\$ 1,234,070	\$ 980,682	\$ 621,624	\$ 822,012	\$ 720,055
Total Net Income	(483,133)	(571,714)	(245,210)	649,113	491,468	92,562	(273,361)	218,189	(19,047)	26,889
Misc Transfers/Costs	(23,170)	(319,974)	(436,867)	(518,201)	(290,765)	(345,950)	(85,697)	(17,801)	(82,910)	(82,891)
Ending Fund Balance	\$ 2,476,220	\$ 1,584,532	\$ 902,455	\$ 1,033,367	\$ 1,234,070	\$ 980,682	\$ 621,624	\$ 822,012	\$ 720,055	\$ 664,053

Base Assumptions:	
Revenue Assumptions	
Total Growth Rate	0.50%
Bay Bridge	0.00%
All Other Bridges	0.50%
Interest Earnings Assumptions	
Floating Rate Bonds	3.41%
Fund Balance Earnings	5.06%
Expenses	
Operating and Maintenance	3.5%
*MTC to BATA transfers	
** CTC adopted pmt schedule	
Contingency	
HBRR	
Efficiency Savings	

- Figure 1 (Potential Draw on Program Contingency) indicates a 100% probability that at least \$100 million will be drawn from the program reserve. From this appears that the project cost is increasing, which should be reflected in Table 6. I realize that Caltrans takes the approach that as long as you're within budget, you're ok but FHWA looks at it differently. Potential increases in project costs should be clearly disclosed for the purposes of public accountability. Due to the changeable nature of the forecast and the continual mitigation efforts underway to reduce the draw, you can indicate on Table 6 that the forecast is as of a certain point in time and then update it in next year's Finance Plan update, as needed.*

Response:

The Potential Draw on Program Contingency is the amount by which the total project (capital outlay and capital outlay support) may exceed the project budget. The potential draw on Program Contingency as of the Second Quarter 2007 is shown in Figure 1 – Potential Draw on Program Contingency. The report states that ongoing risk mitigation actions are underway to reduce the potential call on the Program Contingency. Including more detailed potential draw information in Table 6 may not be most effective because the range of probable cost information (i.e., the cost risk curve) would be lost or not effectively relayed.

The forecast shown in Table 6 (Toll Bridge Seismic Retrofit Program, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, Cost History) of the 2007 Annual Update to the Financial Plan of the SFOBB East Span Seismic Safety Project was for the quarter ending September 30, 2007. The Third Quarter 2007 Forecast of the Program Contingency as shown in Table 6 was \$800.9 million which was approximately \$100 million less than the \$900 million baseline AB 144/SB 66 Program Contingency. The forecasts of each project and the program have been updated in subsequent reports. The forecasts of the Program Contingency reported in the Fourth Quarter 2007 and the First Quarter 2008 Toll Bridge Seismic Safety Reports were \$759.2 million and \$712.4 million, respectively.



## **ITEM 4: DUMBARTON/ANTIOCH BRIDGES**

- a) Retrofit Strategy and Cost Estimates

**TO:** Toll Bridge Program Oversight Committee      **DATE:** October 29, 2008  
(TBPOC)

**FR:** Jason Weinstein, Senior Program Coordinator, BATA  
Brian Maroney, Deputy Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 5a  
Dumbarton/Antioch Bridges  
Item- Retrofit Strategy and Cost Estimates

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**Recommendation:**

For Information Only

The Department and BATA staff recommends approval for an item to be placed on the December 12<sup>th</sup> BATA Oversight Committee agenda which includes the following:

- Introduction of these retrofit projects to the public at the above mentioned meeting
- The cost estimate (see attached)
- The schedule (see attached)
- The procurement of prototype bearings by BATA via a sole source contract
- Discussion on legislation to amend the current law to include the Dumbarton and Antioch retrofit projects in the current Toll Bridge Seismic Retrofit Program

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

At the TBPOC meeting on June 11, 2008, a status update was given on the Dumbarton and Antioch bridge seismic retrofit evaluations. Results from the seismic and engineering analyses of the bridge structures in their as-built condition demonstrated significant overloads in the foundations, substructures, and superstructures. These results are consistent with earlier vulnerability evaluations documented in 2005. At this meeting the preliminary cost estimates based on the projects prior to retrofit strategy were presented.

## *Memorandum*

Since the June 2008 TBPOC meeting, recommended seismic retrofit strategies have been identified, which are very important progress milestones for both projects. Part of establishing a seismic retrofit strategy is to identify the best balance between cost, post-earthquake performance/service, and other variables, around which consensus can be established as to the best course of action. The retrofit strategy for the Antioch Bridge focuses on “no collapse” of the bridge and the retrofit strategy for the Dumbarton Bridge is an “intermediate retrofit” which will have the bridge open to traffic in 3 to 12 months. The intermediate retrofit definition for the Dumbarton Bridge is consistent with other State owned toll bridges.

The design teams have made several presentations to the external and independent Toll Bridge Seismic Safety Peer Review Panel. The Peer Review Panel supports the recommended retrofit strategies. The team awaits formal approval from the State Bridge Engineer.

During the month of September 2008 several cost estimating and risk management meetings were held. BATA has been working on independent cost estimates to give the team redundancy and confidence in the cost estimates for these projects. In early October, a comparison of the capital cost estimates for construction was done and shows the Department and BATA’s estimates to be within 10% for each project.

In order to keep the projects on schedule, the team proposes to advance the design, fabrication, and testing of the prototype bearings that will be used in the retrofits for both bridges. It is proposed to issue a sole source contract to procure these bearings due to their unique demands on the bearing system, need for unusually high level of reliability, and for consistency within the toll bridge inventory.

Currently there is no funding in place to perform the construction of these retrofit projects. The Department and BATA’s staff recommends that the agencies work to amend the current law to include the Dumbarton and Antioch retrofit projects in the current Toll Bridge Seismic Retrofit Program.

### **Attachment(s):**

- 1) Antioch/Dumbarton Bridge Baseline Schedule (10/08)
- 2) Antioch/Dumbarton Seismic Retrofit Summary Costs (10/08)

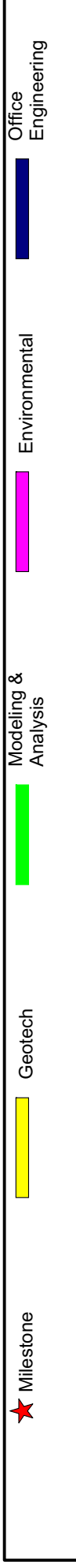
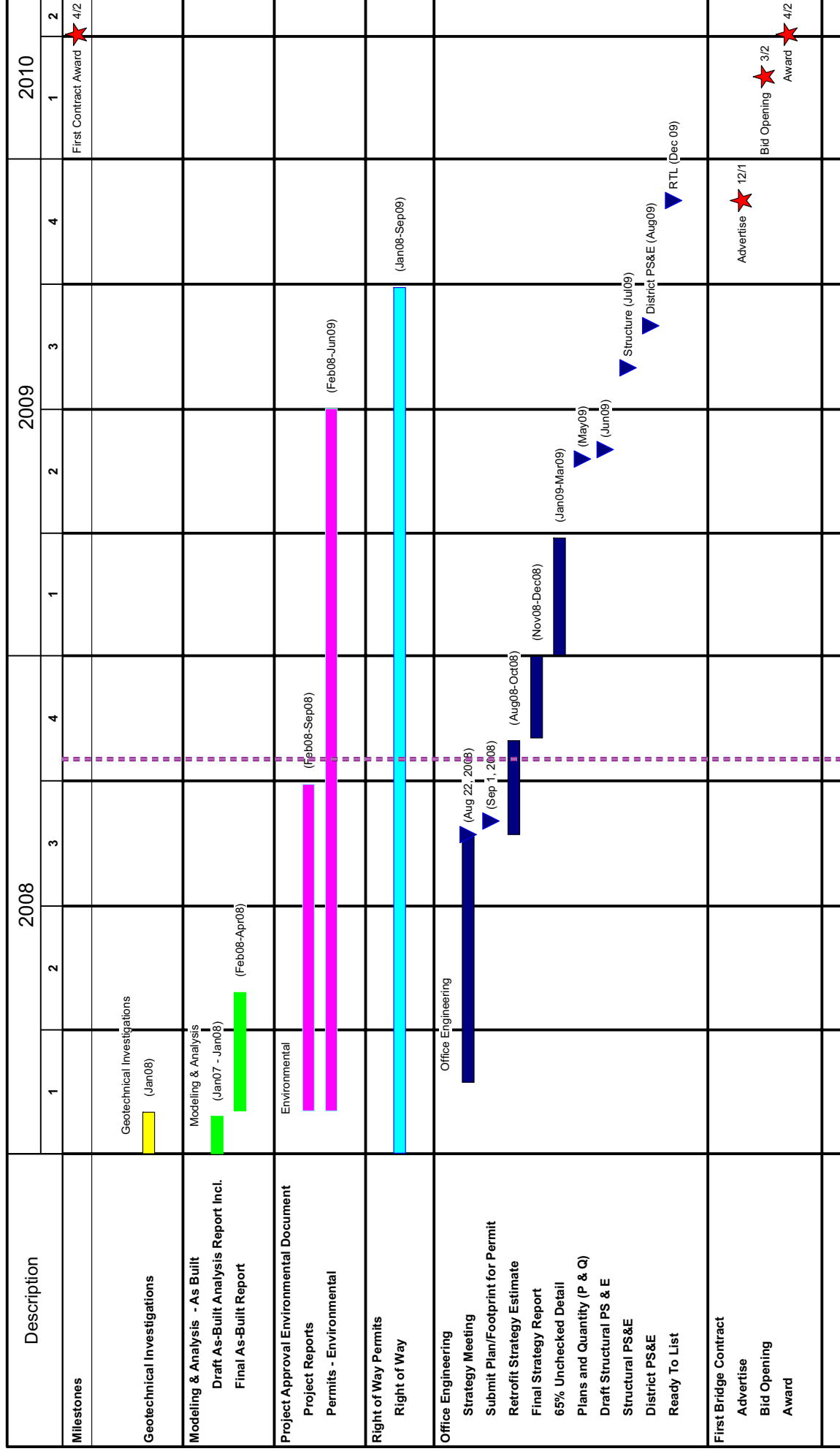
Draft as of October 16, 2008  
Updated with information to  
October 10, 2008

# Antioch / Dumbarton Bridge Baseline Schedule

## Seismic Retrofit Strategy

Date: 10/16/08

10/16/08





# Antioch and Dumbarton Seismic Retrofit Projects

## Summary Costs

Description	Antioch Costs (Millions \$)	Dumbarton Costs (Millions \$)
ROADWAY ITEM WORK	17	18
STRUCTURES ITEM WORK	74	178
MOBILIZATION	10	22
SUPPLEMENTAL WORK ITEMS/STATE FURNISHED MATERIALS	8	7
ESCALATION (MIDPOINT TO CONSTRUCTION)	16	42
CONTINGENCIES	44	94
SUB TOTAL - CAPITAL COST	169	361
DESIGN SUPPORT COSTS	26	35
CONSTRUCTION SUPPORT COSTS	38	85
MITIGATION COSTS	13	7
RISK MANAGEMENT PLAN COSTS	92	174
TOTAL FOR PROJECT	338	662
COMBINED PROJECT COSTS	1000	

## **ITEM 6: PROGRAM ISSUES**

- a. TBSRP Capital Outlay Support (COS)  
Update**

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Ali Banani, COS Project Control Manager, Caltrans  
Peter Lee, Senior Transportation Engineer, BATA

**RE:** Agenda No. - 6a  
Item- Program Issues  
TBSRP Capital Outlay Support (COS) Update

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**Recommendation:**

For Information Only

**Cost Impacts:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

For FY 2008-09, the TBPOC budgeted \$131.6 million for COS with a \$117.4 million COS target and \$14.2 million contingency. Through 1<sup>st</sup> quarter of FY 2008-09, the Department has expended \$32.1 million or 27.3% of the \$117.4 million target.

COS Expense	TBPOC COS Budget Target	Expended/ Committed Through September 2009	% Expended
State Staffing	\$54,100,000	\$12,760,000	23.6%
A/E Staffing	\$63,300,000	\$19,495,000	30.8%
Total TBPOC COS Target	\$117,400,000	\$32,255,000	27.5%
Contingency	\$14,200,000		
Total COS Budget	\$131,600,000		

While State staffing expenses are trending below target, A/E consultant staffing expenses are trending above target and have been further increased by \$3.2 million in unanticipated prior year expenditures billed to the current fiscal year. While the Department is attempting to manage the expenditures, there are significant COS cost risks that will continue to put cost pressure on the COS budget, including TYLin's work designing the east tie-in for YBID and reviewing RFI's and submittals on for the SAS, and transition of the METS inspection contract from MACTEC to CALTROP.

To meet the TBPOC COS target while also meeting the project delivery schedule, A/E expenditures will need to be re-evaluated. Expenditures may need to be curtailed on activities like design/construction support, public outreach, documentation, and Gateway Park planning.

**Attachment(s):**

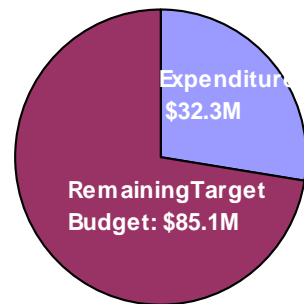
FY 08-09 Expenditure Analyses



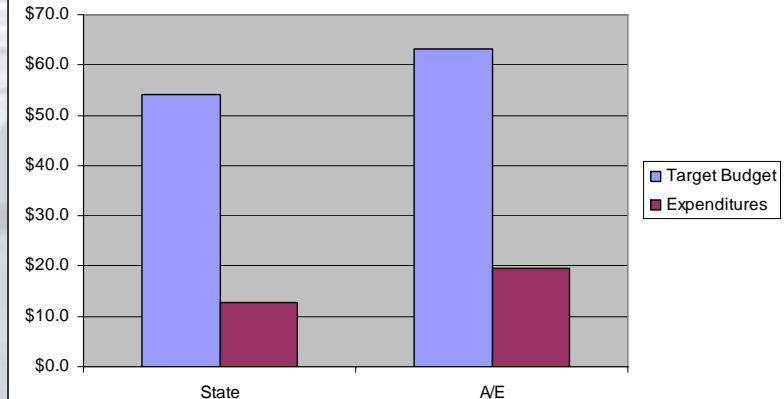
# FY 08-09 Expenditure Analysis

As of September 30, 2008

	<u>Total</u>	<u>State</u>	<u>A/E</u>
Target Budget Expenditures	\$117.4M <u>\$ 32.3M</u>	\$54.1M <u>\$12.8M</u>	\$63.3M <u>\$19.5M</u>
Remaining Budget Contingency	\$85.1M \$14.2M	\$41.3M	\$43.8M



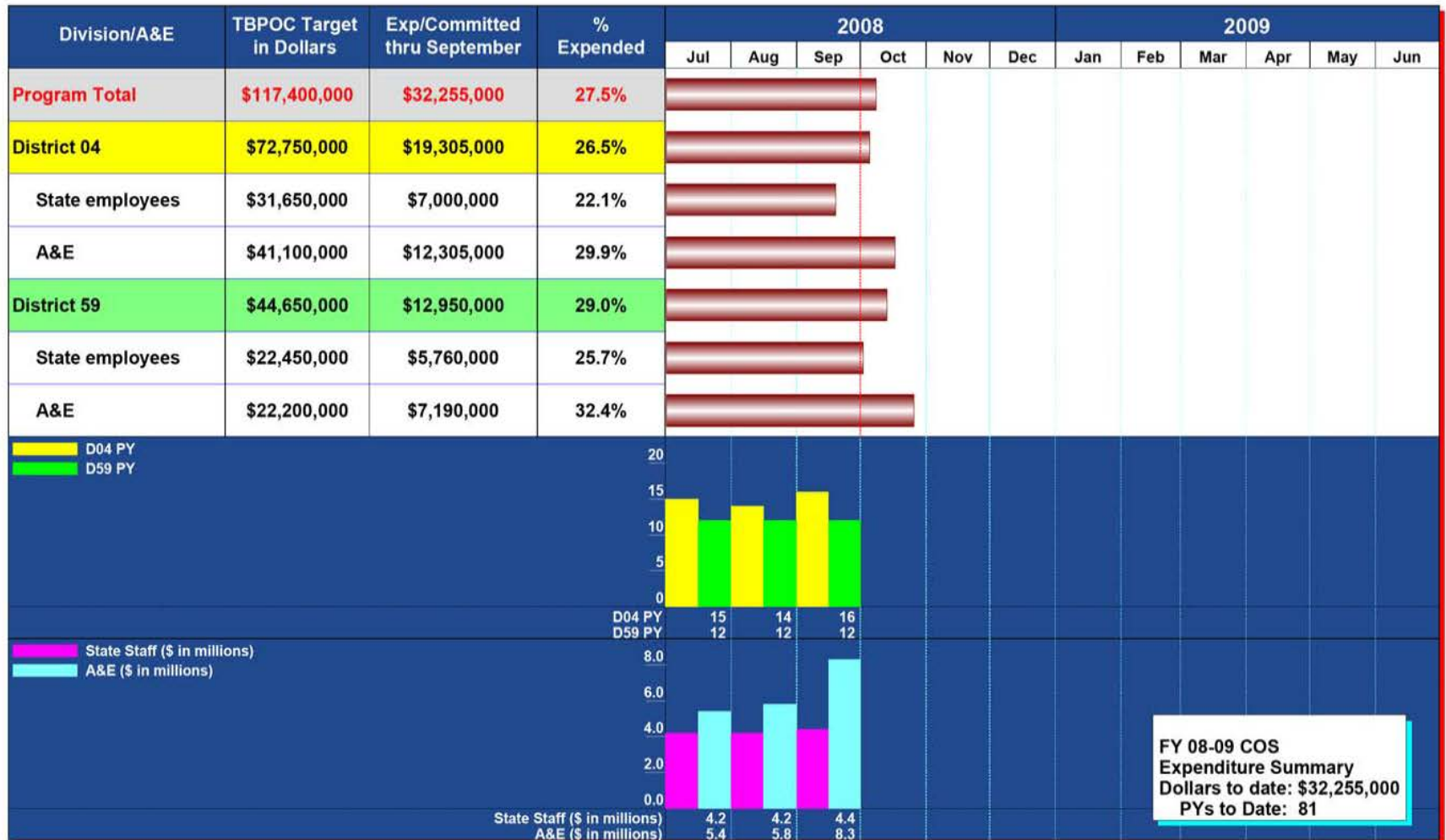
■ Expenditures ■ Remaining Budget



# FY 08-09 Expenditure Analysis

## TOLL BRIDGE SEISMIC RETROFIT PROGRAM

### FY 08-09 Resource Usage through September 2008



## **ITEM 7: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES**

### **a. Self-Anchored Suspension Superstructure (SAS)**

#### **1) SAS Acceleration Strategy Update**

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7a1  
Item- San Francisco-Oakland Bay Bridge Updates  
SAS Acceleration Strategy Update

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**Recommendation:**

The Department recommends **APPROVAL**

**Cost Impacts:**

\$8 million for first year of green tagging

**Schedule Impacts:**

N/A

**Discussion:**

The Department recommends that the TBPOC approve the green tagging contract change order for the SAS Contract (See SAS Green Tagging memo for more information). The green-tagging procedure is one step in the overall strategy to accelerate the fabrication work.

In July 2008, the TBPOC met with ABF in closed session to discuss project acceleration options. Among the items discussed was the need to get to resolution on a number of issues before ABF could determine the possibilities for schedule acceleration. Without resolution, neither ABF nor ZPMC had enough full fabrication experience to determine how much time or resources were needed to successfully accelerate delivery of the project.

Discussed at the meeting was the need to resolve the following:

1. Re-engaging ZPMC – Lack of an acceptance criteria for the deck panels and the devaluation of the RMB was causing ZPMC to lose interest and pull resources from the project.
2. Improve and empower ABF and Department management in China – ABF had just decided to overhaul their management structure in China. ABF requested that



Team China be more empowered to make decisions and to get a design presence in China.

3. Fix the bottlenecks in the fabrication process – ABF requested resolution of the acceptance criteria issue on the deck panels and TBPOC supported participating in a green tagging process to get fabrication QC/QA under control.
4. Resolution of past issues – ABF has noted that OBG fabrication has fallen behind schedule, but has not yet attempted to assign responsibility to the delay. Determination of entitlement to any outstanding issues should be identified and included in any final acceleration proposal.

All parties have made some progress on resolution. ABF has made an upfront payment to ZPMC to resolve currency issues and to reengage them in acceleration discussions. ABF has made management changes to their team in China, and the Department has empowered Team China and added a design presence. On fabrication, both ABF and Department staff in China are working closely to implement the green tagging process, with some measured success. With these changes, ZPMC had become reengaged and began to ramp up fabrication; however, the recent challenges due to the linear indications in the tack welds prevented ZPMC from reaching full production and derailed the acceleration conversation.

In the last two months, the Department has moved quickly to address and resolve the tack weld issues by bringing in outside experts, including the Peer Seismic Review Panel, and working closely with ABF and their welding experts to identify the magnitude and scope of the issue and then to start making the necessary repairs. With resolution of the tack weld issue, ABF and ZPMC again seem poised to reengage in full production, from which they can identify their capacity to accelerate work on the SAS and to further develop an acceleration proposal for the TBPOC to review.

More recently during on-going staff-level discussions between Department and ABF, ABF has stated concerns about the TBPOC's commitment to the past discussions between the TBPOC and ABF management, particularly on the green tagging process that was supported in principle by the TBPOC at the July TBPOC/ABF meeting and now being implemented by ABF and Team China, but not yet approved by the TBPOC.

While the green tagging change order is not the global schedule acceleration proposal, it is part of the process that has been identified by ABF and Team China as necessary to better ensure quality on the project, expedite the approvals, and to help track fabrication of the steel elements of the bridges. The green tagging ensures quality along every step of fabrication, and it will support acceleration of the work and delivery of the bridge earlier. Furthermore, the green tagging process is a risk reduction strategy to ensure that every

sub-assembly is pre-approved prior to incorporation into the next larger assembly and that every segment leaving China fully approved prior to shipment.

For approval by the TBPOC is CCO #77 to fund the first year of green tagging at ZMPC. The \$8 million initial cost covers data base, data collection and verification on the information on the shop floor; it strengthens the QC requirements, and gives QA the necessary real-time access to information necessary to release and tag bridge components. Total cost for implementing the green tagging process is estimated at \$25 million for the entire fabrication run at ZPMC.

Along with implementation of the green tagging process, at least on the limited basis as requested, staff recommends that the TBPOC:

1. continue to have direct discussions with ABF management on the project to push for the acceleration proposal,
2. continue to monitor fabrication process
3. direct staff to determine claims exposure and possible entitlement for past issues to be incorporated into a future acceleration proposal.

**Attachment(s):**

SAS Acceleration Strategy Development Diagram

# SAS Acceleration Strategy Development

## A. July 2008 TBPOC/ABF Meeting Items

a. Reengage ZPMC

b. Improve China Management

c. Resolve Fabrication Issues

d. Resolve All Past Outstanding Issues

## B. Resolution Actions

1. ABF Upfront Payment to ZPMC

1. ABF Staffing Changes  
2. Team China Empowerment  
3. TY Lin Design Presence

1. Acceptance Criteria Approval  
2. Green Tagging Process

1. Determination of Entitlement

## C. ZPMC Reengaged at Full Fabrication

METS QA

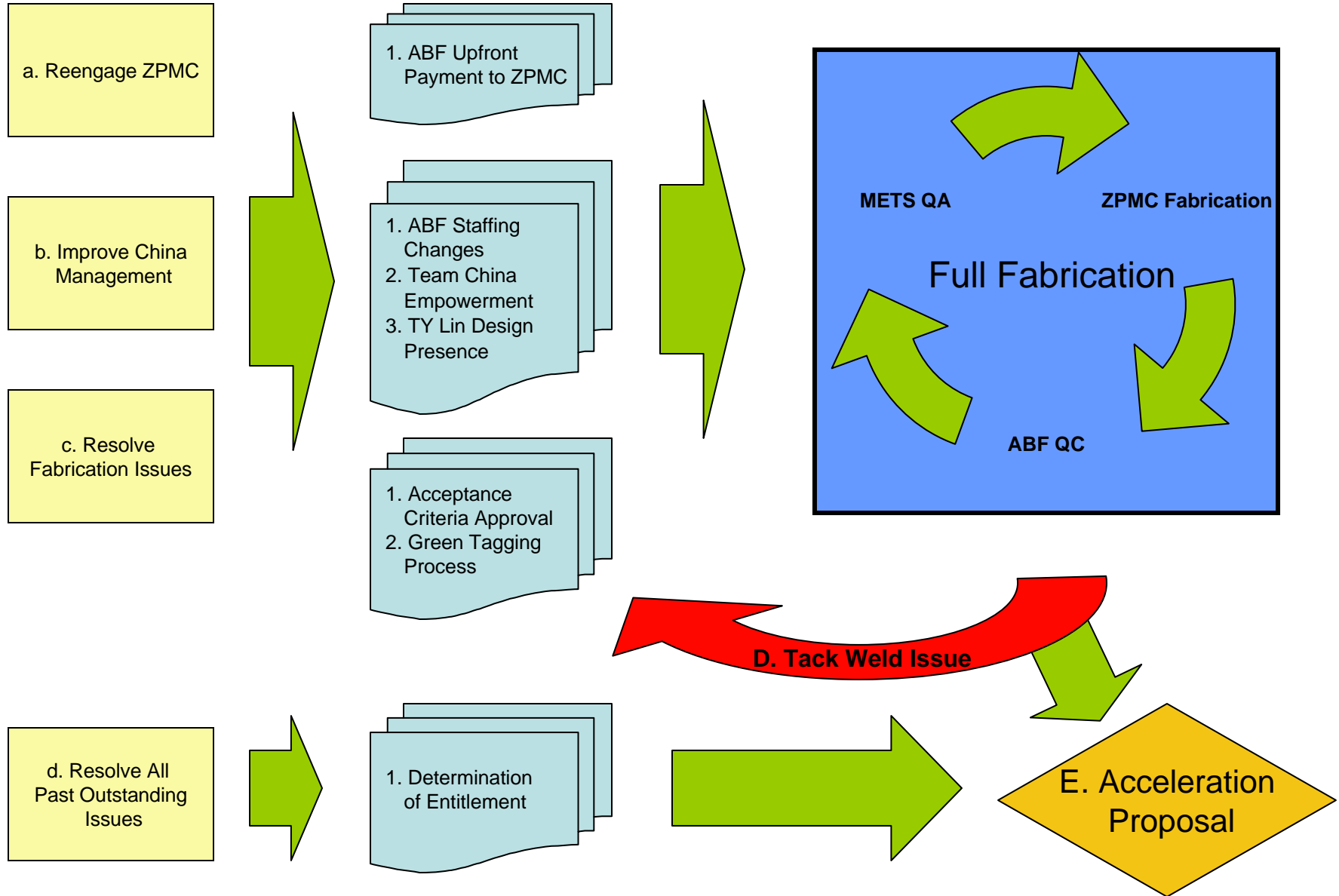
ZPMC Fabrication

Full Fabrication

ABF QC

D. Tack Weld Issue

E. Acceleration Proposal



**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

**a. Self-Anchored Suspension Superstructure  
(SAS)**

**2) Green-Tagging Procedure/Contract Change  
Order (CCO)**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7a2  
Item- San Francisco-Oakland Bay Bridge Updates  
Green-Tagging Procedure/Contract Change Order (CCO)

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### **Recommendation:**

The Department recommends **APPROVAL**

### **Cost:**

\$ 8,646,633 for a 12-month period

### **Schedule Impacts:**

N/A

### **Discussion:**

Quality Assurance in the fabrication of the Self-Anchored Suspension Span (SAS) is a priority, and a necessary requirement for the structure to live up to its lifeline designation and the stipulated 150-year design life. The Quality Assurance (QA) improvements proposed will improve reporting of weld quality in an electronic data base, which then leads to “tagging” structural steel sections. The “tagging” will also help ensure the quality of all the parts at every step of production, and will allow any necessary corrections to be identified and addressed prior to assembly. These improvements support the project goals for accelerated schedule and contract quality requirements.

The China operations for the SAS started in 2007 at ZPMC’s fabrication facility on Changxing Island. Tens of thousands of assemblies and sub-assemblies make up the bridge roadway and tower sections, and about one million welds will be completed at ZPMC before the bridge can be shipped and erected in California. The welding operations on this bridge will generate between five and ten million fabrication reports and other documents. After work is completed, the contractor is required to certify the quality of its work, and the Department will follow to verify that the work meets the contract specifications. The requirements for QC (by the contractor), and QA (by the Department) are clear and known by everyone – that is not the issue. Furthermore, the



## *Memorandum*

quality standards required by the contract are being achieved by ZPMC, and the project will be a success when all is done.

The issue is efficiency, and how quickly the necessary work can be moved through all the production phases, keeping the QC-QA process intact without affecting the production schedules. The contract as it currently is structured does not provide for accepting portions of the work under a QC-QA process that is conducive to an accelerated contract schedule. It has become evident that the traditional QC-QA procedures may result in delays to the delivery dates. This risk can be mitigated by the parties agreeing to make these Quality Assurance (QA) improvements.

The understanding when exactly fabricated work is acceptably complete before it moves to the next step in production is not always shared by all. The Contractor and Fabricator normally desire to produce work with minimum participation from the owner, and they wish to postpone the review of the documents, testing, and acceptance of the completed structure (and the many structural elements contained in the bridge) until QC has completed their work. The contractor may be inclined to release work before all QC procedures have been completed in order to keep up with assembly schedules.

The Owner's priority, on the other hand, is to assure itself that the standards of the contract are met along the way with every weld and every produced element. This begins with audits and certifications before production starts, intensifies during fabrication operations with inspections to assure procedures are being followed, and testing prior to, during, and following every welding operation. After all the submittals are made, QA will then also attest to the completeness of the necessary documents.

In order to avert risks that have been associated with fabrication in China, a greater level of oversight has been placed in the production facilities here. The current effort to have an efficient QC-QA program is heightened by the recognition that we are in a race against time to achieve seismic safety. Despite efforts by the Department to track all the assemblies and sub-assemblies, and all the issues arising with every piece (example - deck panels and all necessary repairs) via daily spreadsheets updates, it has been burdensome and difficult – and not efficient!

The Quality Assurance (QA) improvements captures a lot of information in progress, and it statuses the work in all the shops in real time. This is done by QC personnel collecting data on the shop floor. The information is made available in a data base to all parties that can review, discuss, and resolve all outstanding issues anytime before the elements of the work (structural assembly, sub-assembly, weld, and weld repair) can green tagged, and allowed onto the next step in production.

The cost of Quality Assurance (QA) improvements includes a large and a significant staff increase of required to collect the data in the shops, inputting the information, and verifying its accuracy before it can be used for managing and decision making, as required. The intent is to resolve intermediate hold points for work elements in fabrication quickly, and to allow production to be advance unimpeded at all times. It is estimated the Quality Assurance (QA) improvements with full participation by the Department will cost about \$8.3M for the first year, with a reduced annual costs for the remaining fabrication work.

### Benefits for the Green Tagging Procedures:

- All parties share the same information in real time
- Early assurance that all structural elements (and the associated documentation) meet the contract requirements
- Corrective actions may be taken earlier; internal hold points will be resolved faster
- Timely and effective QA acceptance approvals to green tag and release materials for further assembly
- Independence of QC- QA process is maintained
- QC-QA personnel working together to resolve issue
- Incremental approvals of bridge elements as they are completed makes certification easier
- Shipment dates will not be delayed as a result of questionable quality issues
- External Quality issues that may arise in the future may be addressed more quickly

### Risks for not participating with the contractor in a Green Tagging Procedure:

- Information may not be accurate, complete, and not timely for problem resolution
- Assembly and sub-assemblies' Approvals not reliable or timely to meet desired schedules
- Traditional QC-QA process may cause unacceptable delays to shipments and delivery
- 5 – 10 million documents need to stored and managed
- Records may not be reconciled before shipment; pending issues will be hard to resolve.

## *Memorandum*

Implementing the Quality Assurance (QA) improvements will support the TBPOC goals for acceleration and produce an orderly way for assuring quality issues. It is recommended that this Change Order be approved.

**Attachment(s):**

1. Draft CCO 077 & Memorandum
2. Quality Assurance Improvements Flow Chart

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

**CCO: 77    Suppl. No. 0    Contract No. 04 – 0120F4    Road SF-80-13.2/13.9    FED. AID LOC.:**

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

**NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantity (unless otherwise stated, rates for rework shall be at contract price, agreed price and force actually used and no allowance will be made for idle time. Engineer's Estimate.

**DRAFT**

CCO 077 - CCO v12 20081024.doc

hal work at contract price, agreed price and force actually used and no allowance will be made for idle time. Engineer's Estimate.

This change order provides Quality Assurance (QA) improvements for the Orthotropic Box Girder (OBG), and Tower assemblies. Quality Assurance shall be improved by increasing welding report requirements and by implementing a Quality Assurance database along with a physical tagging procedure (green tagging procedure) for fabricated assemblies. The tagging procedure, in conjunction with the database system, establishes a process that tracks, verifies, and documents incremental progress for fabricated sub-assemblies and assembly stages.

**Extra Work at Agreed Unit Price:**

Input the following information into the QA database:

No.	Description	No.	Description	No.	Description
1	OBG or Tower	14	Joint Type	27	MT Acceptance Date
2	Lift	15	(Item Deleted)	28	Name of MT Level II
3	Segment	16	Filler Metal	29	Date of UT
4	Assembly	17	Date Welding Started	30	UT Result
5	Sub-Assembly	18	Date Welding Completed	31	Length of UT Defects
6	Plate Number	19	Date of VT	32	UT Acceptance Date
7	Weld ID	20	VT Result	33	Name of UT Level II
8	Total Weld Length	21	Length of VT Defects	34	Date of RT
9	Length of Defect	22	VT Acceptance Date	35	RT Result
10	Repair Report (Summarize)	23	Name of VT CWI	36	Length of RT Defects
11	Welder ID	24	Date of MT	37	RT Acceptance Date
12	Weld Process	25	MT Result	38	Name of RT Level II
13	Weld Position	26	Length of MT Defects		

The above listed input information is required per Special Provisions section 8-3.01 Welding and the Welding Quality Control Plan (WQCP), with the exception of "Item No. 8 - Total Weld Length" and summarization required to input "Item No. 10 - Repair Report." Update the Quality Assurance Database (QAD) daily with the latest information listed above.

Implement the following Quality Assurance Procedure (Green Tagging) for the Tower and Orthotropic Box Girders (OBG):

**1. Purpose**

1.1 This written procedure establishes the guidelines that shall be followed for In-Process and final Quality Assurance Acceptance of components on the SFOBB Project including the following

- 1.1.1. Production planning and scheduling
- 1.1.2. Documentation verification
- 1.1.3. Approval request notification

**2. References**

2.1. The following documents shall be used as guidelines for developing this written procedure:

- 2.1.1. QA Approval form
- 2.1.2. Fabricators Welding Reports
- 2.1.3. Welding Report Summary Log
- 2.1.4. Quality Assurance Acceptance package

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

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**CCO: 77      Suppl. No. 0      Contract No. 04 – 0120F4      Road SF-80-13.2/13.9      FED. AID LOC.:**

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**2.1.5. SFOBB Status tags**

- 2.2. This procedure is intended to provide a uniform procedure for all Quality Assurance (QA) and Quality Control (QC) personnel representing the Fabricator, the Contractor, and the Department. A team consisting of members from all parties shall be established to execute the In-Process inspection verification of components.
- 2.3. The In-Process inspection verification team shall have the authority to adopt necessary processes required to facilitate and expedite the acceptance described in this procedure.

**3. Production Planning and Scheduling**

- 3.1. The Contractor's Fabrication Manager shall be the person designated for the responsibility of production planning and scheduling.
- 3.2. Prior to submitting components for formal acceptance the Contractor shall implement In-Process verification that shall include the following:

- 3.2.1. The yellow In-Process tag (figure 1) shall be affixed to the component, by the Contractor's representative, before part is moved from welding station. The yellow tag shall document that the items listed below have been completed.
- 3.2.2. All contract required non-destructive examination (NDE) has been performed and is documented on the component as being acceptable.
- 3.2.3. All contract required visual inspections have been performed and is documented on the component as being acceptable.
- 3.2.4. All critical and non-critical weld repairs have been completed and re-inspected by the original method of inspection and are documented on the component as being acceptable.
- 3.2.5. All Heat Straightening Request and Internal Heat Straightening Reports have been completed and the affected welds inspected by the appropriate NDT method.
- 3.2.6. All Non-conformance reports issued by the Fabricator, Contractor, or Department for material and/or workmanship have been corrected.
- 3.2.7. All contract required dimensional inspections have been performed and found to be acceptable as part of the dimensional control plan.
- 3.2.8. Upon completion of welding, NDT and dimensional inspections the team described in section 2.2 shall mutually agree upon the status of the component and complete the yellow In-Process tag by initialing in the appropriate area.
- 3.2.9. If the specified inspection method is not applicable, the inspector shall write NA.
- 3.2.10. Tag numbers shall be issued and controlled by the Contractor's Quality Control Manager QCM.
- 3.2.11. Upon this mutual agreement, the team described in section 2.2 shall indicate acceptance of the In-Process verification on the QA Approval form (Figure 4). The Contractor shall submit the QA Approval form to the QCM for document verification as described in section 4 of this procedure.
- 3.2.12. After QA approval the yellow In-Process tag may be removed. The green Accept tag (figure 2) shall be placed by the QCM or designated representative.
- 3.2.13. Store components in accordance with approved Fabrication Procedure and the Contract Provisions.

- 3.3. The QA Approval form shall include the weld joint number (s) requesting approval, subassembly number, assembly number, grade and date. The QA Approval form shall be issued for the following subassemblies:

**1) OBG**

- a. Bottom plates before assembly into three-panel unit.
- b. Side Plates before assembly into three panel unit or corner assembly.
- c. Edge Plates before assembly into corner assembly.
- d. Deck Plates before assembly into three panel unit and installation of diaphragms or Corner assembly.
- e. Longitudinal Diaphragms before segment assembly.



**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

<b>CCO:</b> 77	<b>Suppl. No.</b> 0	<b>Contract No.</b> 04 – 0120F4	<b>Road</b> SF-80-13.2/13.9	<b>FED. AID LOC.:</b>
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- f. Floor beams before segment assembly. Applicable to FL-1, FL-2, FL-3, and whole unit assemblies.
- g. All three panel assemblies before they go into segment assembly and super panels.
- h. Corner assemblies.
- i. Segment assembly before painting and lift assembly.
- j. Lift assembly and painting before loading onto ship.

## 2) Tower

- a. Diaphragms before assembly into tower shaft.
- b. Skin plates before stiffeners are welded onto it.
- c. Skin plates **with** stiffeners before assembly into tower shaft.
- d. Tower shaft assembly **before** painting.
- e. Lift assembly and painting before loading onto ship.

## 3) Crossbeams

- a. Bottom plates before assembly.
- b. Side Plates before assembly.
- c. Deck Plates before assembly.
- d. Crossbeam assembly and painting before loading onto ship including matching to OBG.

## 4) Counterweights before installation onto the OBG or prior to shipping.

## 5) Suspender bracket before installation onto the OBG.

## 6) Bike Path brackets before shipping.

## 7) Bike Path prior to shipping.

## 8) Barrier prior to shipping.

## 9) Tower struts prior to shipping.

## 10) Cross Braces before shipping.

## 11) Other Sub-assemblies as directed by the Engineer.

3.4. A red Outstanding Repair tag (figure 3) shall be affixed near the yellow tag when any HSR, CWR or NCR is written to indicate an item that requires correction and/or closure prior to acceptance of the item. The red tag shall indicate the reason for tagging (specific HSR, CWR or NCR), the issuing body (the Fabricator, the Contractor, or the Department) and the date issued.

3.5. The issuing and placement of the red outstanding repair tag shall be the responsibility of the contractor's QC Department.

## 4. Documentation Verification

4.1. The Contractor's Quality Control Manager is responsible for the verification of documentation.

4.2. Following receipt of the QA Approval form, the Contractor's QC Department shall conduct a document review process that shall insure the following:

- 4.2.1. All contract required nondestructive examination (NDE) has been performed and reported acceptable as part of the weld report submitted by the Fabricator.
- 4.2.2. All contract required visual inspections have been performed and reported as acceptable as part of the weld report submitted by the Fabricator.

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

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**CCO: 77    Suppl. No. 0    Contract No. 04 – 0120F4    Road SF-80-13.2/13.9    FED. AID LOC.:**

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- 4.2.3. All critical and non-critical weld repairs have been re-inspected and reported to be acceptable per the original inspection method.
- 4.2.4. All Heat Straightening Requests and Internal Heat Straightening Reports have been completed and the appropriate NDT performed and reported to be acceptable per the original inspection method.
- 4.2.5. All Non-conformance reports (NCR's) issued by the Fabricator, the Contractor, or the Department for material and/or workmanship shall be closed.
- 4.2.6. All contract required dimensional inspections have been performed and reported as acceptable as part of the dimensional control / dimensional verification plan.
- 4.2.7. Following the document review process the contractor's QC shall notify the fabricator's QC of any omitted or missing reports, records or logs. Notification shall be submitted in writing.
- 4.2.8. Omitted reports, records and logs shall be submitted and accepted by the Contractor prior to proceeding with formal acceptance by the Department as described by section 5 of this procedure.
- 4.2.9. A Weld Summary Log shall be created for all welds represented by the approved QA Approval form.
- 4.2.10. Acceptable QA Approval forms shall be signed by the Contractor's QA Manager and attached to the Weld Summary Log representing the components listed and shall be retained.

**5. Approval Request Notification**

5.1. The Contractor shall initiate approval Request Notification.

5.2. The contractor's QC shall submit the following to the Department for Quality Assurance Acceptance as part of the Quality Assurance Acceptance Package.

- 5.2.1. QA approval form.
- 5.2.2. Welding Summary Log.
- 5.2.3. Dimensional verification reports (when applicable).
- 5.2.4. The Contractor's Certificate of Compliance.
- 5.2.5. The Fabricator's Certificate of Conformance.
- 5.2.6. Upon approval of the Quality Assurance Acceptance Package, the Department shall affix the appropriate tag(s) representing the components included in the Quality Assurance Acceptance Package indicating the components final acceptance.

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 77    Suppl. No. 0    Contract No. 04 – 0120F4    Road SF-80-13.2/13.9    FED. AID LOC.:

<b>SFOBB STATUS TAG</b>				
<b><u>IN-PROCESS</u></b>				
SUBASSEMBLY _____				Tag No. _____
<b><u>INSPECTIONS</u></b>		<b><u>REPAIRS</u></b>		
	ZPMC	ABF	CT	
FVT				
UT				
MT				
RT				
Dimen.				
Notes:				

Figure 1. SFOBB Status Tag (In-Process, Yellow Tag)

<b>SFOBB STATUS TAG</b>	
<b><u>ACCEPT</u></b>	
Subassembly: _____	Tag No. _____
Grade: _____	
ABF QA: _____	DATE: _____
Final approval shall be based upon successful document review and official CT tagging	

Figure 2. SFOBB Status Tag (Accept, Green Tag)

<b>SFOBB STATUS TAG</b>	
<b><u>OUTSTANDING REPAIR</u></b>	
Subassembly: _____	Tag No. _____
Issued by: _____	
CWR <input type="checkbox"/> HSR <input type="checkbox"/> NCR <input type="checkbox"/>	Report#: _____
WRR <input type="checkbox"/> VT <input type="checkbox"/> MT <input type="checkbox"/>	Report#: _____
RT <input type="checkbox"/>	DATE: _____
QA: _____	

Figure 3. SFOBB Status Tag (Outstanding Repair, Red Tag)

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 77    Suppl. No. 0    Contract No. 04 – 0120F4    Road SF-80-13.2/13.9    FED. AID LOC.:

<u><b>QA APPROVAL REQUEST FORM</b></u>	
<b>ATTACHMENT A</b>	
Component _____	Date _____
In-Process tag No. _____	Location _____
<small>*Attach In-Process tag</small>	
Weld numbers _____	
ZPMC Team Representative _____	Date _____
ABF Team Representative _____	Date _____
CT Team Representative _____	Date _____
<hr/> <b>DOCUMENTATION REVIEW</b> <hr/>	
NDE complete	Yes <input type="checkbox"/> No <input type="checkbox"/>
Repairs complete	<input type="checkbox"/> <input type="checkbox"/>
NCR's closed	<input type="checkbox"/> <input type="checkbox"/>
ABF QA Manager _____	Date _____
QA Approval Request form Rev 0	

Figure 4. QA Approval Request Form

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

**CCO: 77      Suppl. No. 0      Contract No. 04 – 0120F4      Road SF-80-13.2/13.9      FED. AID LOC.:**

The following mutually agreed to all-inclusive monthly unit rate for straight time and overtime constitutes full compensation, including all markups. The all-inclusive mutually agreed to monthly unit rate for all staff who work 50% or more of the calendar days and are dedicated to the extra work described herein including: local consultants, fabricator's data input personnel, fabricator's data collection personnel, and Contractor QC expeditor and oversight personnel. The exchange rate effective on the 15<sup>th</sup> day of the month prior to the progress payment will be used to adjust the unit rate. The exchange rate used for items 1, 2, and 3 is based on 6.8404 RMB per USD. Should this exchange rate fluctuate more than 15%, the monthly unit pay rate will be adjusted for the exchange rate in effect on the 15<sup>th</sup> day of the month.

Description	Agreed Monthly Unit Rate in RMB's	Estimated* Monthly Unit Rate in USD	Months per Year	Estimated Number of personnel	Estimated Total
1. Database Input by Bi-Lingual Local Consultants*	46,250	\$ 6,761.30	12	10	\$ 811,356
2. Database Input by Fabricator*	27,633	\$ 4,039.72	12	15	\$ 727,150
3. Field Data Collection Personnel by Fabricator*	68,750	\$10,050.58	12	35	\$ 4,221,244
4. Contractor QC Inspectors and Oversight Personnel	NA	\$16,938.33	12	7	\$ 1,422,820
*Unit Rates are based on 6.8404 RMB per USD					
<b>Total Est. Extra Work at Agreed Unit Price (12 Month Period)</b>					<b>\$ 7,182,571</b>

The Contractor must submit a monthly log of the additional labor force dedicated for the implementation of this contract change order. The log shall include the individual's name, labor description category, and days worked. A representative of the Contractor and a representative of the Department shall sign the monthly log prior to submittal for payment. This extra work at agreed unit price has been estimated for a duration of twelve (12) months, agreed prices and estimated units shall be reevaluated after September 2009 at the Contractor or Departments request.

**Estimated Extra Work at Agreed Unit Price ..... \$ 7,182,571.00**

**Adjustment of Compensation at Agreed Lump Sum****QUALITY ASSURANCE DATABASE**

The Contractor shall provide a computer system (hardware and software) capable of performing the task specified in this change order for their use. Database updates shall be transmitted to the Department on a Daily basis or as directed by the Engineer. The Department shall receive full access and use of the database.

The Contractor shall implement the QA Database for all information identified in this change order.

**SOFTWARE**

QA database software, including applicable licenses and annual maintenance renewal fees.

The Contractor shall submit, for approval by the Engineer, all software specifications for the software the Contractor proposes to furnish. All database technical support and repair shall be performed by the Contractor. Software maintenance, including licensing and other fees shall be maintained for the duration of the change order. The Contractor shall instruct and assist the Engineer in the use of the software. Computer software furnished shall remain the property of the Contractor and shall not be removed until 30 days after the Contractor has received the final estimate, or as authorized by the Engineer.

The Contractor shall furnish software and all original software instruction manuals to the Engineer, refer to Database System Cost Break-Down for quantity and units. The Department will compensate the Contractor in



**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

**CCO: 77      Suppl. No. 0      Contract No. 04 – 0120F4      Road SF-80-13.2/13.9      FED. AID LOC.:**

conformance with the provisions in Section 4-1.03, "Extra Work," of the Standard Specifications for replacement of software that is damaged, lost or stolen after delivery to the Engineer.

**TRAINING**

After approval of the database system by the Engineer, the Contractor shall provide an initial 8-hour training session to the Department in the use of the software.

The Contractor shall provide training sessions, at 4 hours per session. The Contractor can expect subsequent training sessions to be distributed throughout the duration of the change order until the total number of sessions has been completed, refer to Database System Cost Break-Down for quantity and units.

Each training session shall accommodate up to 8 Department Employees. Training sessions shall be at a location, date and time acceptable to the Engineer.

The Session Trainer shall be approved by the Engineer.

**DATA DELIVERY REQUIREMENTS**

All data shall be delivered to the Engineer electronically on CD-ROM and shall be compatible with the database software and with general hardware running Microsoft Windows operating system. The database information shall be formatted and organized as directed by the Engineer. Database updates shall be transmitted to the Department on a daily basis. All documents generated for the Department shall also be supplied in an Adobe (.pdf) file format that is generated digitally, not scanned.

The database software shall also provide a method of exporting all data to a Microsoft Access database keeping all the existing relationships intact. This export function should be accessible by the user and should be able to be performed at any time by the user.

Submit the Database System Cost Break-Down below to the Engineer for approval.

**DATABASE SYSTEM COST BREAK-DOWN**

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
Database Computer Software for Department – concurrent users	EA	8		
Computer Software Training Sessions – ½ Day (Fabrication Facility/China)	EA	4		
Computer Software Training Sessions – ½ Day (Oakland, CA)	EA	4		

The approved cost break-down will be used to determine partial payments during the progress of the work and as the basis for calculating the adjustment in compensation for the database system due to increases or decreases of quantities ordered by the Engineer. When an ordered change increases or decreases the quantities of an approved cost break-down item, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the quantity of a contract item of work in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications. If an ordered change requires a new item which is not on the approved cost break-down, the adjustment in compensation will be determined in the same manner specified for extra work in conformance with Section 4-1.03D, "Extra Work," of the Standard Specifications.

If requested by the Contractor and approved by the Engineer, changes to the database system listed in the approved cost breakdown, including addition of new computer hardware and software, will be allowed. The net cost increase to the QA Database item will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

**PAYMENT**

The agreed lump sum price paid for the database system shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals, and for doing all the work involved in providing and maintaining the database system.

**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 77    Suppl. No. 0    Contract No. 04 – 0120F4    Road SF-80-13.2/13.9    FED. AID LOC.:

The Department will retain an amount equal to \$50,000 for each estimate period in which the Contractor fails to maintain the database system conforming to the requirements of this change order, as determined by the Engineer. Retentions held in conformance with this section shall be in addition to all other retentions provided for in the contract. The retention for failure to provide or maintain an acceptable QA Database will be released for payment on the next monthly estimate for partial payment following the date that an acceptable QA Database has been provided or maintained. Upon completion of all contract work, any remaining withheld funds associated with the QA Database will be released for payment. No interest will be due the Contractor on withheld amounts.

If the Contractor fails to complete any of the work in providing and maintaining the QA Database required by this section, the Engineer shall make an adjustment in compensation in conformance with the provisions in Section 4-1.03C, "Changes in Character of Work," of the Standard Specifications for the work not performed. Adjustments in compensation for QA Database will not be made for any increased or decreased work ordered by the Engineer in furnishing QA Database.

The Contractor shall submit, for approval by the Engineer, a schedule of values detailing the cost breakdown of the agreed lump sum. The schedule of values shall reflect the items, work, quantities and costs. The Contractor shall be responsible for the accuracy of the quantities and costs used in the schedule of values submitted for approval.

The sum of the amounts for the items and work listed in the schedule of values shall be equal to the agreed lump sum price.

When approved in writing by the Engineer, the schedule of values will be used to determine progress payments during the progress of the work. No partial payment will be made until the schedule of values is approved in writing by the Engineer.

The agreed lump sum price paid shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications shall not apply to the agreed lump sum price. Full compensation for damages due to delays shall be considered as included in the payments made in accordance with "Time-Related Overhead" of these special provisions and Section 8-1.09, "Right of Way Delays," of the Standard Specifications and no additional compensation will be allowed therefor.

Agreed Lump sum payment resolves all prior cost related to this change and association with authority to proceed issued by the Department. For this work, the Contractor will be paid the Agreed Lump Sum of \$ 1,105,863.00; this sum constitutes full compensation, including markups, for this change.

**Adjustment of Compensation at Agreed Lump Sum.....\$ 1,105,863.00**

**Estimated Cost:    Increase    ☒    Decrease    ☐    \$8,646,633.00**

**By reason of this order the time of completion will be adjusted as follows:    0 days**

**Submitted by**

<b>Signature</b>	<b>Resident Engineer</b>		<b>Date</b>
		Gary Pursell, Sup.T.E.	

**Approval Recommended by**

<b>Signature</b>	<b>Supervising Bridge Engineer</b>		<b>Date</b>
		Richard Morrow, Sup.T.E.	

**Engineer Approval by**

<b>Signature</b>	<b>Principal Transportation Engineer</b>		<b>Date</b>
		Peter Siegenthaler, Prin.T.E.	

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

**NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.**

**Contractor Acceptance by**

<b>Signature</b>	<b>(Print name and title)</b>	<b>Date</b>

**CONTRACT CHANGE ORDER MEMORANDUM**

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

DATE

TO Michael Forner, Principal TE		FILE 04-0120F4	
FROM Gary Pursell, Resident Engineer		04-SF-80-13.2/13.9	
CCO NO. 77	SUPPLEMENT NO. 0	CATEGORY CODE CHSA	CONTINGENCY BALANCE (including this change)
\$ 8,646,633.00      INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED?      YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
SUPPLEMENTAL FUNDS PROVIDED \$ 0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS?      YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

**THIS CHANGE ORDER PROVIDES FOR:**

Providing Quality Assurance (QA) improvements for the Orthotropic Box Girder (OBG), and Tower assemblies. Quality Assurance shall be improved by increasing welding report requirements and by implementing a Quality Assurance database along with a physical tagging procedure (green tagging procedure) for fabricated assemblies. The tagging procedure, in conjunction with the database system, establishes a process that tracks, verifies, and documents incremental progress in real time for fabricated sub-assemblies and assembly stages.

Quality Control (QC) is the responsibility of the Contractor and Quality Assurance (QA) is the prerogative of the Engineer, as defined under the Standard Specifications and the Special Provisions. The established practice of the Department's QA program is such that QC processes are verified independently and separately but not until the fabricator has completed their QC process. The Department is required to accept all fabricated work, in accordance with the QA process, prior to shipment.

The SAS Orthotropic Box Girder (OBG) and tower are comprised of thousands of welded steel stiffened members. Multiple members are then joined and welded into larger sub-assemblies. All members and sub-assemblies must meet QA requirements before incorporation into larger assemblies. Resolving QA issues once members are assembled and buried in larger assemblies will be difficult without adversely impacting the schedule. Therefore, it is necessary to improve the Department's QA process to ensure the contract requirements are met continuously throughout fabrication.

Contract Special Provision Section 8-3, Welding, subcategory "Welding Quality Control", requires Contractor submission of QC welding reports every 10 days for welding completed on the project. This information is delivered in large volumes with numerous reports for completed welding non-destructive testing (NDT), repairs, repeated NDT, heat straightening, daily production logs and other documents. The contract requires QC inspection, testing, and reporting on all welding related work. However, the contract does not specify formatting or organization, of the information, and reports to be submitted.

The large volume of Contractor QC reporting documentation along with no contract specified formatting or organizational requirements has created serious challenges for the Department to fulfill its QA responsibilities in a timely manner. QA process inefficiencies are causing delays to the verification and QA acceptance process that are difficult to recover from as the workload and documentation volume increases. In addition, there is also no contractually required means to enforce traceability between the subassemblies and the submitted weld reports.

This change order provides enhanced weld reporting, a Quality Assurance database along with a fabricated assembly tagging procedure (green tagging procedure). The implementation of the database system will provide traceability, organization, and reporting functions, which will be utilized in conjunction and to support the physical tagging procedure. These enhancements will allow the Department's QA personnel to verify the QC process in a timely fashion, mitigating possible schedule delays.

The physical tagging (Green Tagging) procedure in conjunction with the QA database will provide a uniform procedure for in-process inspection verification and acceptance of OBG and Tower components. The Green Tagging procedure along with QA database provides the following:

1. A process that creates a direct link between subassemblies and welding reports.
2. Allows the QC/QA process to be executed in an efficiently.
3. Information is accessible, available, and sort able in real-time.

4. Will ensure records are reconciled before components and assemblies are shipped.
5. Subassemblies will be accepted and certified upon completion.
6. Reports (data packets) for each assembly or sub-assembly shall be generated based on Department needs.
7. Provides a progress tracking capability for fabricated sub-assemblies and assembly stages.

This change order reduces the Department's exposure to potential fabrication delays caused by the discovery of unacceptable work late in the fabrication process or after shipment due to inefficiencies in the performance of QA acceptance. This change provides a searchable and traceable database documenting the QC/QA procedures for OBG and Tower components fabricated in China.

Payment to provide and input into the QA database system and implement the physical tagging (Green Tagging) procedure will be at Extra Work at Agreed Unit Price in the amount of \$7,182,571.00. Payment to provide access and use of the Contractor's database, data base software, software training, and compensation for work previously authorized by Department Authority to Proceed (ATP) will be paid as Extra Work at Agree Lump Sum in the amount of \$1,105,863.00. This change is estimated to total \$8,288,434.00, which can be financed from the contingency fund. A detailed cost estimate is on file.

This change order work is estimated for one-year with the exception being the agreed lump sum items. This change will be re-evaluated after approximately one year to determine funding needs and/or modifications needed to continue the improved QA process. If it is determined that the improved QA process will continue through the duration of fabrication, then additional cost will be determined based upon past production rates and learning curves using a measured-mile approach.

The Contractor and the Department mutually agree that this change does not warrant a time adjustment, as it does not affect the controlling operation.

This change order has concurrence from Gary Pursell (Resident Engineer), Rick Morrow (Sup. Structure Rep), Patrick Lowry (METS), Ken Terpstra (Project Manager), Pete Siegenthaler (Principal TE), Mike Forner (Principal TE). TBPOC approval is required for this change and will be obtained by the Department prior to authorizing the change order with the Contractor. Design and Maintenance concurrences are not required for this change.

The Resident Engineer requests an Issue and Approve from the Division of Construction for this Change.

<b>CONCURRED BY:</b>		<b>ESTIMATE OF COST</b>	
STRUCTURE REPRESENTATIVE	DATE	THIS REQUEST	TOTAL TO DATE
SR. BRIDGE ENGINEER	DATE	ITEMS	
		FORCE ACCOUNT	\$7,540,770.00
FHWA REPRESENTATIVE	DATE	AGREED PRICE	\$1,105,863.00
		ADJUSTMENT	
PROJECT ENGINEER Ken Terpstra	DATE	<b>TOTAL</b>	<b>\$8,646,633.00</b>
OTHER (SPECIFY)	DATE	<b>FEDERAL PARTICIPATION</b>	
		<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
	DATE	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
		PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
DISTRICT PRIOR APPROVAL BY		FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY			
RESIDENT ENGINEER SIGNATURE	DATE		

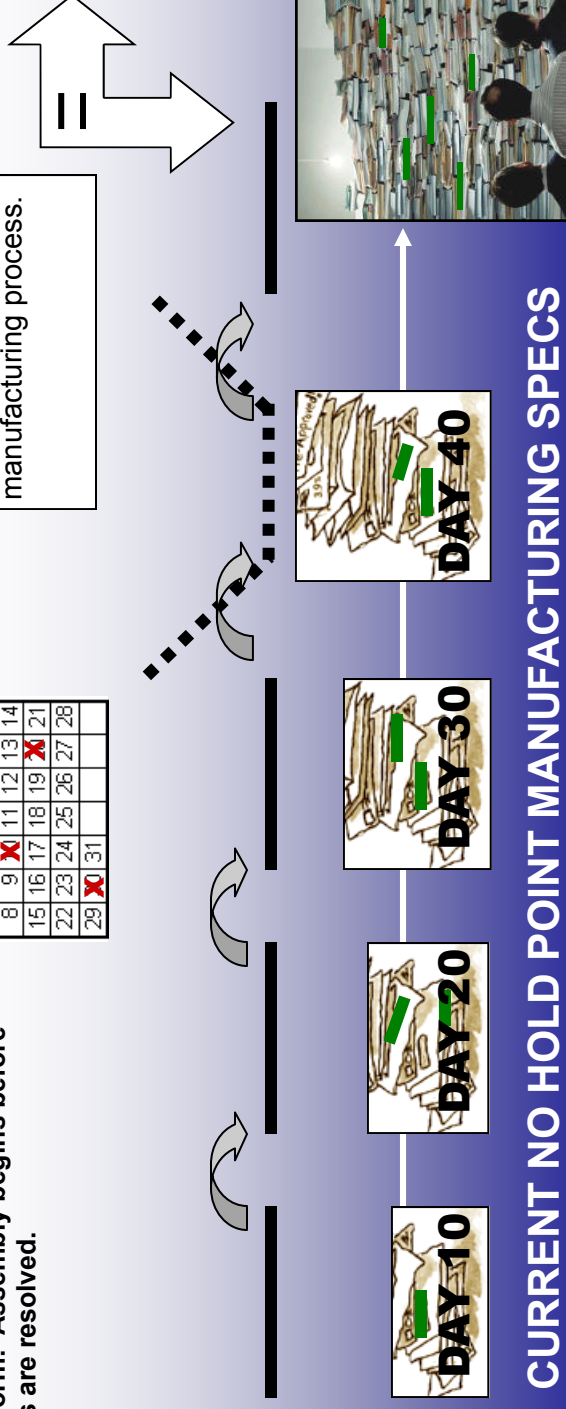
This Section  
updated by CADb

## Quality Assurance Improvements

Weld report chronologically collected and submitted every 10 days in hard copy form. Assembly begins before issues are resolved.

October						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Final Documentation Reconciliation at end of manufacturing process.

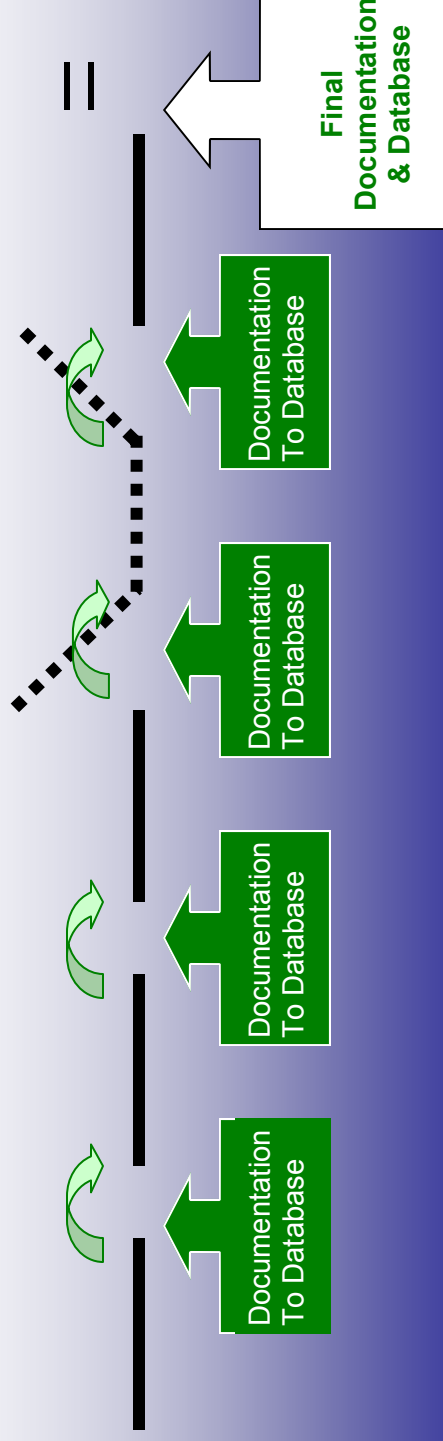


POSSIBLE DEFECT AT SHIPMENT

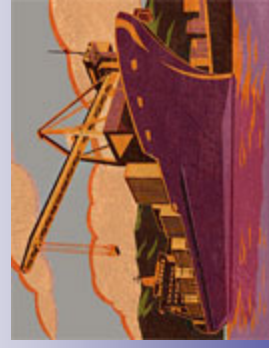


## CURRENT NO HOLD POINT MANUFACTURING SPECS

Weld reports collected daily for every operation and entered into an electronic data base. Quality issues reconciled systematically with every completed piece prior to assembly.



BEST QUALITY



## PROPOSED MANUFACTURING HOLD POINT SPECS



**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

**a. Self-Anchored Suspension Superstructure  
(SAS)**

**3) Mechanical Electrical Plumbing (MEP)  
Update**

## *Memorandum*

**TO:** Toll Bridge Oversight Committee (TBPOC)    **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7a3

Item                      San Francisco-Oakland Bay Bridge Updates  
                                 Mechanical Electrical Piping (MEP) Update

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**Recommendation:**

**APPROVAL** of MEP Implementation Proposal

**Cost:**

Not to exceed \$34,200,000

**Schedule Impacts:**

No impact to open to traffic date

**Discussion:**

The Mechanical, Electrical and Piping (MEP) utilities for the new east span of the San Francisco Oakland Bay Bridge (SFOBB) are currently planned to be installed through the various east span corridor contracts. Most of the MEP work is within the contract limits of the Skyway (Contract 04-012024), the Self-Anchored Suspension Bridge (SAS) (Contract 04-0120F4) and the Oakland Touchdown (OTD1) (Contract 04-0120L4). The Department is proposing to integrate the Skyway and OTD1 portions of the MEP work into the on-going SAS contract as a change order, in order to mitigate risk to the opening of the new span and to enhance system compatibility throughout the structure.

The major components of the MEP system are listed below:

- 12KV Electrical Cable
- Bridge & Navigational Lighting
- Closed Circuit Television (CCTV)
- Traffic Operating System (TOS)
- Fiber Optic Cables
- Call Boxes
- Microwave Vehicle Detection System
- Supervisory Control & Data Acquisition (SCADA)

Due to the anticipated 5 to 6 year lag between the completion of the Skyway and the placement of traffic on the new east span, the degradable portions of the MEP work were deleted from the Skyway contract by change order. Similarly, major portions of

## *Memorandum*

the MEP work in the OTD1 contract were removed prior to bid under the concept of having this work installed under one contract would result in a more uniform MEP system from the Skyway to the substation located on OTD1. Although a separate contract (04-0120N4) was set up to provide for the integration and testing of all MEP work between these contracts, it was contemplated that this work could also be added into one of the on-going corridor contracts if deemed appropriate.

The MEP contract PS&E package is currently at the 35% design completion with an estimated 15 months required to achieve a final design prior to the PS&E review and award process. The Department has determined that 2 major benefits would be realized by integrating the MEP contract work into the SAS contract as outlined below:

1) Risk Mitigation to Delaying the Opening of the New SFOBB East Span – Based on the current Corridor Opportunity Schedule, the completion of the MEP contract work could potentially impact the placement of traffic on the new span. Incorporating the work into the SAS contract by change order will provide the following schedule benefits:

- The contract PS&E formatting, review, advertisement, bid opening and award process that typically consumes 9 to 12 months would be eliminated. Additionally, the necessity of incorporating the as-built conditions from the on-going SAS contract will be eliminated.
- The SAS contractor can be ordered to procure long lead-time materials and move forward with design submittals prior to the final design completion.
- In the event one or several components of the MEP design realizes a significant delay due to reasons such as technology upgrades, the completed components of the design package can be provided to the contractor sequentially to allow for their installation.
- Having a single contractor eliminates potential delays concerning congestion and staging of the work at the SAS and Skyway contract interfaces.

Based on the \$100,000 per day established on the SAS contract as liquidated damages for the opening of the westbound structure to traffic, any mitigation of risk towards delaying this opening could be considered a substantial benefit to the traveling public.

2) Enhancing System Compatibility Throughout the SFOBB Structure – System compatibility between the numerous components of the MEP systems is a major

## *Memorandum*

concern. Incorporating the work into the SAS contract by change order will provide the following benefits:

- All MEP components from the SAS structure to the substation located on OTD1, approximately 85% of the system, would be supplied by one contractor. It is particularly important, due to the advanced technologies incorporated in these systems, that the components not only be ordered from the same manufacturer but, also be procured at the same time to assure technology conformity between the systems.
- The systems will be installed as continuous units in lieu of separate contracts that would result in non-desirable splicing or connections of the systems at the MEP / SAS interface.

The cost of the MEP contract work is estimated at \$34,200,000. Of this cost, an estimated \$16,800,000 pertains to furnishing light poles and fixtures for the roadway lighting. This work will be competitively bid under a Department of General Services contract.

The risk associated with incorporating the corridor wide MEP work into the SAS contract is the non-competitive pricing that will result from the work not being competitively bid. The non-competitive pricing risk would be applicable to the remaining estimated cost of \$17,400,000. The Department believes the risk associated with these costs can be substantially mitigated through the SAS contract, which includes identical MEP work that was bid under a competitive environment. This competitively bid work can be used to verify reasonable pricing for the added MEP change order work. That withstanding, the risk can be estimated at 10% to 15% of the \$17,400,000 in work translating to \$1,700,000 to \$2,600,000. Some of this risk would be offset by the savings in Capital Outlay Support from eliminating the 9 to 12 month PS&E review and contract award process.

Informal discussions with the SAS contractor indicate that adding the MEP work to the contract by change order is not anticipated to result in any time extension to the contract, nor would it have any anticipated impact to the opening of the westbound structure to traffic.

Subsequent to the installation of the MEP components, a future contract change order will be requested to perform system wide testing on the various components of the work over the entire SFOBB east span. This work, estimated at \$5,400,000, will be incorporated into either the SAS or Yerba Buena Island Transition Structure contract depending of the status of those contracts as they near completion.

## *Memorandum*

In summary, staff is recommending that the TBPOC concur in the proposed MEP implementation concept and to direct the Department to begin formal discussion with the SAS contractor to implement the changes. The TBPOC is requested to approve a cost not to exceed \$34,200,000 (See Rough Order of Magnitude Estimate) and no change to the open to traffic date of the bridge. Staff will return regularly to the TBPOC to update them on the status of the proposal.

### **Attachments:**

1. Rough Order of Magnitude (ROM) Estimate for the MEP Integration Work
2. Summary MEP Integration Work



## Rough Order of Magnitude (ROM) Estimate for the MEP Integration Work

### Furnish Light Poles & Fixtures (Department of General Services Contract)

ITEM 1	Furnish Light Poles & Fixtures (estimate is done by Caltrans Design)	\$15,300,000.00
ITEM 2	Storage Cost	\$1,500,000.00
	Contingency (Included in the above)	
	<b>Total Estimated Cost To Furnish Light poles &amp; Fixtures (DGS Contract)</b>	<b>\$16,800,000.00</b>

### MEP Integration Work Installation (Proposed CCO to SAS)

ITEM 1	Install Light poles (Skyway and OTD1)	\$2,000,000.00
ITEM 2	Installation of MEP items eliminated from Skyway & OTD1	\$8,000,000.00
ITEM 3	Upgrades & Revisions of the already installed components (Skyway & OTD1)	\$2,500,000.00
ITEM 4	Installation of BASE System (conduits & Cabinets within Skyway & OTD1)	\$2,000,000.00
ITEM 5	Contingency (20%)	\$2,900,000.00
	<b>Total Estimated Cost For installation</b>	<b>\$17,400,000.00</b>

### System wide (Entire Corridor) testing (Proposed future CCO to SAS or YBITS 1)

ITEM 1	System wide (Entire Corridor) testing, Relay Setting, SCADA development & commissioning	\$3,000,000.00
ITEM 2	Resolution of system wide testing issues (for entire corridor)	\$1,500,000.00
ITEM 3	Contingency (20%)	\$900,000.00
	<b>Total Estimated Cost Of System wide Testing</b>	<b>\$5,400,000.00</b>

	<b>Grand Total</b>	<b>\$39,600,000.00</b>
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9/22/2008		YBI-1	YBI-2	SAS	OTD-1 WEST OF MOLE SUBSTA.	OTD-1 EAST OF MOLE SUBSTA.	OTD-2	OAK. SUBSTA	YBI SUBSTA	SKYWAY
ITEMS										
FURNISH & INSTALL 15KV CABLE		YBI-1	N/A	SAS	MEP	OTD-1	OTD-2	Oak Sub	DONE	MEP
15KV CABLE TERMINATIONS/SPLICES/TEST		YBI-1	N/A	SAS	MEP	OTD-1	OTD-2	Oak Sub	DONE	MEP
NON-CT TRAY CABLE DIVIDERS				SAS						MEP
FURNISH & INSTALL FIBER OPTIC CABLE		YBI-1	YBI-2	SAS	MEP		OTD-2			MEP
FIBER OPTIC CABLE TERMINATIONS/SPLICES/TEST		YBI-1	YBI-2	SAS	MEP		OTD-2			MEP
FURNISH LIGHTING STANDARDS BY DGS (DEPT OF GENERAL SERVICES)		DGS	DGS	DGS	DGS	DGS	DGS	N/A	N/A	DGS
FURNISH CALL BOXES		BATA	BATA	BATA	BATA	BATA	BATA	N/A	N/A	BATA
INSTALL LIGHTING STANDARDS		YBI-1	YBI-2	SAS	MEP	MEP	OTD-2	N/A	N/A	MEP
INSTALL CALL BOXES		YBI-1	YBI-2	SAS	MEP	MEP	OTD2	N/A	N/A	MEP
CCTV		YBI-1	N/A	SAS	MEP		OTD-2	N/A	N/A	MEP
MVDS		YBI-1	N/A	SAS	MEP		OTD-2	N/A	N/A	MEP
INSTALL SCADA COMPONENTS		YBI-1	YBI-2	SAS	MEP		OTD-2			MEP
LOCAL TESTING SCADA & TELEPHONE COMPONENTS		YBI-1	YBI-2	SAS	MEP		OTD-2	Oak Sub	DONE	MEP
LOCAL TOS SYSTEM TESTING		YBI-1	YBI-2	SAS	MEP		OTD-2	N/A	N/A	MEP
COMMUNICATION CABLE		YBI-1	YBI-2	SAS						MEP
LOCAL COMMUNICATION CABLE TESTING		YBI-1	YBI-2	SAS						MEP
CMS SIGNS INSTALLATION AND WIRING		YBI-1	YBI-2	SAS				N/A	N/A	MEP
STRONG MOTION DETECTION COMMUNICATION CABLE			YBI-2	SAS				N/A	N/A	MEP
LOOP DLC CABLES INSTALLATION		YBI-1	YBI-2							MEP
NAVIGATION LIGHTING SYSTEM		N/A	N/A	SAS				N/A	N/A	MEP
OVERHEAD SIGN		YBI-1								MEP
COMPLETE FIBER OPTIC SYSTEM TESTING		MEP	MEP	MEP	MEP	MEP	MEP	MEP	MEP	MEP
TEST OVERALL 15KV, GND SYSTEM , TOS AND SCADA (WESTBOUND)		MEP	MEP	MEP	MEP	MEP	MEP	MEP	MEP	MEP
TEST OVERALL 15KV, GND SYSTEM , TOS AND SCADA (EASTBOUND)		MEP	MEP	MEP	MEP	MEP	MEP	MEP	MEP	MEP
MEP Proposed added work as CCO to SAS		MEP								
MEP Proposed added work as Separate CCO to SAS / YBITS or OTD2										
Furnished by the Department of General Services Contract		DGS								
Furnished by the Bay Area Toll Authority Contract		BATA								
MEP work will be done within original contract		SAS								

**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

**a. Self-Anchored Suspension Superstructure  
(SAS)**

**4) TY Lin Insurance Update**

## *Memorandum*

**TO:** Toll Bridge Oversight Committee (TBPOC)    **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7a4  
Item                      San Francisco-Oakland Bay Bridge Updates  
                                 TY Lin Insurance Update

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**Recommendation:**

To be discussed at meeting

**Cost:**

To be presented by T.Y. Lin International/Moffat and Nichol Engineers, Joint Venture

**Schedule Impacts:**

N/A

**Discussion:**

In 1998, at the beginning of the consultant design phase of the East Span seismic Safety Project, the Department conferred with the Department of General Services (DGS) regarding the appropriate level and type of design liability insurance for the required consultant services. DGS raised the following issues:

- “Liability exposures are significant in a project of this magnitude and type and need to be analyzed differently than routine construction projects the State has entered into in the past;”
- Individual insurance coverage could be required for the prime design consultant and for each sub consultant, but this would require the Department to establish individual policy requirements for each consultant and to track the status of each individual policy over the course of the work;
- A single project specific insurance policy could be obtained that would cover all consultant services. Benefits of this approach were stated to be ready assurance of coverage for all consultants, a higher amount of coverage could be obtained, the policy would definitely be in existence for a defined period (as opposed to an individual policy that might end on termination of a single consultant’s services), and a single source of recovery would be available,

## *Memorandum*

avoiding counter claims and extensive adversarial proceedings between multiple parties in the event of a claim;

- “...since the State will ultimately be responsible for payment of all insurance premiums associated with this project, we feel the Project Specific approach will allow the State to partner with the Prime [consultant] Contractor in determining the appropriate level of protection taking premium costs into consideration;” and
- other project specific policies procured by the State had a wide range of coverage in relation to project costs –
  - \$10 million in coverage for a \$50 million project (Junipero Serra Building)
  - \$5 million in coverage for a \$350 million project (S.F. Civic Center)
  - \$25 million in coverage for a \$125 million project (Elihu Harris Building).

The Department included a requirement for a project specific insurance policy in the design contract executed with T.Y. Lin International/Moffat and Nichol Engineers, a Joint Venture (JV). The contract required a policy of “at least” \$15 million. A project-specific professional liability insurance policy was ultimately procured by the JV with limits of \$50,000,000 per occurrence and \$50,000,000 aggregate for a premium of \$1,485,000. The policy will provide coverage through December 2010, and this term was based on a project schedule that anticipated project completion as early as 2006. The JV agreed to pay a portion of the premium, with the premium cost split by the Department and the JV (70% / 30% respectively). The consultant services provided to date amount to \$136 million and an additional \$22 million has been recently added to the contract by amendment.

The JV approached the Department two years ago regarding the procurement of an extended or new insurance package to cover the period between 2010 and project completion, including a 3-year post construction period. A proposed replacement policy was presented to the TBPOC at the December 11, 2007 TBPOC meeting. The policy premium was in excess of \$10 million. The TBPOC directed staff and legal counsel to continue research and negotiation with the goal of a lower premium or other alternative to insurance. The JV has developed a revised policy proposal with a lower premium and will provide their revised proposal at the November 6, 2008 TBPOC meeting.

**Attachment(s):**

N/A



**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

**b. Yerba Buena Island Detour (YBID)**

**1) Update**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7b1

Item- San Francisco-Oakland Bay Bridge Updates

Yerba Buena Island Detour (YBID) Update

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**Recommendation:**

For Information Only

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

A verbal update on the status of the Yerba Buena Island Detour contract will be provided at the meeting.

**Attachment(s):**

N/A

**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

**b. Yerba Buena Island Detour (YBID)**

**2) Contract Change Orders (CCOs)**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7b2  
Item- San Francisco-Oakland Bay Bridge Updates  
Yerba Buena Island Detour Contract Change Orders

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**Recommendation:**  
**APPROVAL**

**Cost:**

CCO 112, S3 - \$3,000,000.00  
CCO 129 - \$14,712,500.00  
CCO 149- \$1,600,000.00

**Schedule Impacts:**  
N/A

**Discussion:**

Contract Change Order (CCO) 112 reflects a significant spike in steel prices. Contract Change Orders 129 and 149 reflect design changes for the East Tie-In structure for the roll-out/roll-in. A brief description of each CCO is provided as follows:

**CCO 112, Supplement No. 3** (\$3,000,000) – for the procurement of raw steel for the East Tie-In, as specified under CCO 112 and CCO 112, Supplements No. 1 and No. 2;

**CCO 129** (\$14,712,500) – for the erection of the steel skid bent and beam of the East Tie-In structure;

**CCO 149** (\$1,600,000) – for the furnishing of the lead core and pot bearings for the East Tie-In structure.

**Attachment(s):**

1. Draft CCO 112, S3 & Memorandum
2. Draft CCO 129 & Memorandum
3. Draft CCO 149 & Memorandum
4. CCO Implementation Strategy Doc October 29, 2008

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 112	Suppl. No. 3	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Procure the following materials required for the East Tie-In (ETI) structure of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)) as determined by the Engineer.

1) Procure all steel bolts required for the erection of the skid bent system and truss.

2) Procure all steel plate required for the retrofit of the existing structure.

All procurements made under this change order shall be authorized by the Engineer prior to the actual ordering of materials

Any salvage value or disposal costs associated with the materials procured under this change order are deferred.

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time extension will be made in accordance with Section 8-1.07, "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

Estimated Cost of Extra Work at Force Account .....\$3,000,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$3,000,000.00

By reason of this order the time of completion will be adjusted as follows: Deferred

Submitted by		
Signature	Resident Engineer BILL CASEY	Date
Approval Recommended by		
Signature	SFOBB Construction Manager PETER SIEGENTHALER	Date
Engineer Approval by		
Signature	SFOBB Construction Manager PETER SIEGENTHALER	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date



CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
			FED. NO. ACBRIM-080-1(097)N	
CCO#: 112	SUPPLEMENT#: 3	Category Code: CHPA	CONTINGENCY BALANCE (incl. this change) \$98,782,754.12	
COST: \$3,000,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Add Funds Material Procurement ETI			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 8

THIS CHANGE ORDER PROVIDES FOR:

The procurement of materials for the East Tie-In (ETI) structure in order to advance the contract schedule.

The original change order, along with Supplement No. 1 and Supplement No. 2, provided for the advance procurement of raw steel for the fabrication of the ETI truss and skid bent system at an estimated cost of \$14,000,000. This change order provides for the procurement of the bolts associated with the erection of the truss and skid bent system and the procurement of steel plate for the planned retrofit of the existing steel truss. Approximately 40,000 bolts will be required for the erection of the truss and skid bent system and up to 100 metric tons of steel plate may be required for the retrofit of the existing structure.

In addition to the bolt and plate procurement specified under this supplement, it is now anticipated that additional funds will be required for the raw materials associated with the truss and skid beam system provided for under the original Change Order No. 112 and Supplements No. 1 and No. 2. As stated within the change order memo for Supplement No. 2, the price of raw steel has been extremely fluid with steel mills adding a surcharge above the quoted prices upon delivery of those orders. The surcharges that have been applied to date indicate additional funding will be required to procure all the authorized steel.

The work shall be performed as extra work at force account at an estimated cost of \$3,000,000 and shall be financed from the contract's contingency funds. A cost analysis is on file.

Costs or credits associated with any salvage value or disposal cost associated with these temporary materials is deferred.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

Maintenance concurrence is not required as this change order only acts to procure materials. Concurrence for the construction of the ETI structures shall be obtained under the change order that provides for the construction of that structure.

The Contractor's signature is not required for additional funds for Extra Work at Force Account change orders. Therefore this change order is being issued unilaterally.

CONTRACT CHANGE ORDER MEMORANDUM

<b>CONCURRED BY:</b>			<b>ESTIMATE OF COST</b>		
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:		Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$3,000,000.00	\$17,000,000.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	<b>TOTAL</b>	<b>\$3,000,000.00</b>	<b>\$17,000,000.00</b>
Other (specify):		Date	<b>FEDERAL PARTICIPATION</b>		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE		
District Prior Approval By:		Date	<input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input checked="" type="checkbox"/> NON-PARTICIPATING		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL SEGREGATION    (if more than one Funding Source or P.I.P. type)		
Resident Engineer's Signature:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
			FEDERAL FUNDING SOURCE    PERCENT		

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 129	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Lump Sum:

Perform the following work pertaining to the East Tie-In (ETI) portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)).

- 1) Provide for the erection of the steel skid bent and beam in accordance with the plans and specifications of Pages No. 3 through 39 of Change Order No. 116.
- 2) Provide for the erection of the steel truss in accordance with the plans and specifications of Pages No. 3 through 84 of Change Order No. 140.
- 3) Provide for the loading, transportation and offloading of all fabricated steel for the truss from the Contractor's lay down yard at Mare Island in Vallejo or at Pier 80 in San Francisco to the jobsite.
- 4) Furnish and install the metal decking, decking support brackets, and shear studs for the truss' concrete deck.
- 5) Furnish and apply an acoustic dampening material to the upper deck of the truss in accordance with Section 5-1.14 "Contractor Design" of the contract Special Provisions.

For this work, the Contractor will be compensated a lump sum of \$14,712,500.00. This sum constitutes full and final compensation for all costs, including all markups, for the work specified herein.

Compensation for the following 9 items of work pertaining to the erection of the ETI steel truss, skid bent, and skid beam have not been addressed by this change order:

- 1) Costs associated with furnishing and installing the ETI expansion joints (including expansion joint barrier) and bearings (including bearing stopper blocks and masonry plates).
- 2) Costs associated with furnishing and placing the reinforcing steel and concrete for the truss' concrete deck and barrier.
- 3) Costs associated with the construction of the temporary work platform to access the southern end of the truss and any crane roads or pads required for the truss and skid bent erection.
- 4) Costs associated with furnishing and installing any piles required for the foundation of the falsework required for the erection of the truss.
- 5) Costs associated with furnishing and installing concrete pads or embeds required for the work elevator for the truss.
- 6) Costs associated with cleaning the fabricated steel due to excessive salt water residue.
- 7) Costs associated with any weld inspection pertaining to the erection of the truss, skid bent, and skid beam.
- 8) Costs associated with any traffic control pertaining to the erection of the truss, skid bent, and skid beam.
- 9) Costs associated with handling, transporting and off-loading of the fabricated steel for the skid bent and skid beam from the Contractor's lay down yard to the jobsite.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 129	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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Compensation for the 9 items of work specified above shall be paid under a separate change order.

The fabrication of the truss shall be performed in a manner that shall minimize the stresses in the structure in its permanent (post-camber) geometric configuration. This requires the fabrication of all field end holes (bolt holes) to match the permanent configuration as opposed to their cambered position. It is understood that this fabrication method could result in considerable additional cost in the erection of the structure. Particularly, the erection may require truss members to be manipulated by force in order to match the end connections. Compensation provided herein includes all additional costs resulting from this specified fabrication method.

The compensation provided under this change order is based on the construction of a temporary work platform that will allow crane access from the southern end of the truss during erection. The cost of constructing this work platform is excluded from this change order and shall be paid separately. In the event this platform is not constructed and crane access from the southern end of the truss is not available, the Contractor shall be compensated an additional \$535,000.00 for all additional costs resulting from this limited access. This compensation, if required, shall be paid under a separate change order.

The compensation provided under this change order is based on steel erection being performed under a 10-hour day 6-day per week schedule in an effort to support the placement of traffic on the Temporary Bypass Structure by September 8, 2009. This effort is based on steel delivery to the jobsite or lay down yard beginning as outlined below:

- 1) Fabricated Steel for Skid Beam & Bent (Bents A3 through A6 & Bents B3 through B6) - Steel delivery shall begin by December 23, 2008.
- 2) Fabricated Steel for Skid Beam & Bent (Bents A1 through A2 & Bents B1 through B2) - Steel delivery shall begin by April 9, 2009.
- 3) Fabricated Steel for the Truss - Steel delivery shall begin by March 7, 2009.

In the event these steel delivery schedules are not met or ensuing deliveries are insufficient to sustain the Contractor's erection operations, the Contractor may be ordered by the Engineer to expedite their subsequent steel erection activities in order to mitigate any delays to the completion of the work. Any costs associated with any expedition of the work, if so ordered, shall be compensated separately from this change order.

Estimated cost of Extra Work at Lump Sum .....\$14,712,500.00

Estimated Cost: Increase ☒ Decrease ☐ \$14,712,500.00

By reason of this order the time of completion will be adjusted as follows: Deferred		
Submitted by		
Signature	Resident Engineer BILL CASEY	Date
Approval Recommended by		
Signature	SFOBB Construction Manager PETER SIEGENTHALER	Date
Engineer Approval by		
Signature	SFOBB Construction Manager PETER SIEGENTHALER	Date
We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.		
NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.		
Contractor Acceptance by		
Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
			FED. NO. ACBRIM-080-1(097)N	
CCO#: 129	SUPPLEMENT#: 0	Category Code: CHPT	CONTINGENCY BALANCE (incl. this change) \$101,782,754.12	
COST: \$14,712,500.00		INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
CCO DESCRIPTION: ETI Erection Costs			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 8

THIS CHANGE ORDER PROVIDES FOR:

the erection of the steel truss, skid bent and beam of the East Tie-In (ETI) structure.

This project, the Temporary Bypass Structure (TBS), was awarded in March 2004 to construct a detour that will allow for the tie in of the new east span of the San Francisco Oakland Bay Bridge to Yerba Buena Island. The TBS encompasses three main structures, the East Tie-In to the existing bridge, the West Tie-In (WTI) to Yerba Buena Island and the Viaduct structure between the two tie ins.

The original contract was awarded as a performance based contract with the contractor responsible for the design of the structures based upon meeting specified design criteria. The Department issued a December 14, 2006 memo entitled Strategy for South-South Detour Contract Completion which was approved by Tony Anziano (Toll Bridge Program Manager), Richard Land (Chief Engineer) and subsequently by the TBPOC. This memo recommended that the design of the ETI structure be assumed by the Department as opposed to the as-bid performance based contractor design.

The new design of the ETI structure provides for a roll-out / roll-in concept with a new double deck steel truss span being erected adjacent to the existing span and then rolled into place after the existing span is rolled out. This change order provides for the erection of the steel skid bent and beam that will be erected adjacent to and under the existing span that will act to support the existing and new truss during the roll out / roll in process.

The work encompassed under this change includes the erection of 4,300 metric tons of steel members concerning the truss, skid bent and beam. Procurement of the raw steel and bolts necessary for this work shall be compensated under the previously approved Change Order No. 112 and its supplements. Fabrication of the steel for the skid bent and beam and the steel truss shall be compensated under the previously approved Change Order No. 116 and Change Order No. 140 respectively.

Compensation for the erection of the truss, skid bent and beam shall be paid as extra work at an agreed lump sum price of \$14,712,500.00 which shall be financed from the contract's contingency funds. A cost analysis is on file.

Numerous costs associated with the ETI steel erection have been excluded from this change order as identified within the change order text. The work pertaining to these costs are being subcontracted by the steel erector and have not been agreed to date. These costs shall be compensated under separate change orders once the full scope of the work is established.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

This change was requested by Mike Whiteside - YBI Coordination Engineer per memorandum dated August 25, 2008 and concurred by Hong Wong - Project Engineer and Alec Melkonians - Project Manager.

Maintenance concurrence is not required since it does not affect any permanent roadway features.



CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Mike Whiteside, Toll Bridge Design	Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$14,712,500.00	\$14,712,500.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$14,712,500.00	\$14,712,500.00
Other (specify):		Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE		
District Prior Approval By:		Date	<input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input checked="" type="checkbox"/> NON-PARTICIPATING		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL SEGREGATION    (if more than one Funding Source or P.I.P. type)		
Resident Engineer's Signature:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
			FEDERAL FUNDING SOURCE    PERCENT		

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 149	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

- Perform the following work pertaining to furnishing the lead core and pot bearings for the East Tie-In structure in accordance with the plans and specifications shown on Sheets No 2 through 55 of this change order and as determined by the Engineer:
- 1) Furnish 2 EA Type 1 lead rubber bearings for Pier E1, including all masonry plates, mounting plates, sole plates, stopper rings and appurtenances.
  - 2) Furnish 1 EA Type 1 lead rubber bearings for prototype testing, including all appurtenances.
  - 3) Furnish 2 EA pot bearing assemblies for Bent 52A, including all bearing plates, mounting plates, masonry plates, stoppers and appurtenances.
  - 4) Furnish 2 EA pot bearing assemblies for Pier E1, including all bearing plates, restrainer plates, masonry plates and appurtenances.
  - 5) Furnish mock up masonry plates.
  - 6) Perform all bearing prototype and proof testing.
- Estimated Cost of Extra Work at Force Account .....\$1,600,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$1,600,000.00

By reason of this order the time of completion will be adjusted as follows: Deferred

Submitted by		
Signature	Resident Engineer BILL CASEY	Date
Approval Recommended by		
Signature	Area Construction Manager DEANNA VILCHECK	Date
Engineer Approval by		
Signature	SFOBB Construction Manager PETER SIEGENTHALER	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
			FED. NO. ACBRIM-080-1(097)N	
CCO#: 149	SUPPLEMENT#: 0	Category Code: CHPT	CONTINGENCY BALANCE (incl. this change) \$1,588,279.12	
COST: \$1,600,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Furnish ETI Bearings			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 8

THIS CHANGE ORDER PROVIDES FOR:

Furnishing and testing the lead rubber bearings and pot bearings for the East Tie-In (ETI) structure.

This contract provides for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour will allow for the construction of the permanent structure, the Yerba Buena Interim Transition Structure, which connects the signature SAS structure to Yerba Buena Island.

The detour consist of three main structures, the East Tie-In (ETI) to the bridge, the West Tie-In to the island and the viaduct structure between the two tie ins. The contract was awarded as a performance based project with the contractor responsible for meeting the design criteria specified in the contract.

A December 14, 2006 Department strategy memorandum, approved by Tony Anziano, Toll Bridge Program Manager, and Richard Land, Chief Engineer, recommended that the Department assume the design responsibility for the East Tie-In (ETI) structure. Based on this memorandum, the design of the structure was changed from a design that incorporated the existing steel truss bridge with the new structure to a design that replaces the existing structure with a new structure (roll out / roll in).

The new ETI design requires the fabrication and installation of 4 EA pot bearing assemblies and 2 EA lead rubber bearings each including various masonry plates, mounting plates, restrainer plates, stoppers and appurtenances. An additional lead rubber bearing shall also be furnished as part of the specified prototype testing.

This change order provides for furnishing the 7 bearings, providing mock ups of the masonry plates for field testing and providing all prototype and proof testing of the bearings as specified under the plans and specifications provided under this change order.

The work shall be performed as extra work at force account at an estimated cost of \$1,600,000.00 which shall be financed from the contract's contingency funds. A cost analysis is on file.

Costs pertaining to the actual installation of the bearings are excluded from this change order and shall be compensated separately.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

This change was requested by Mike Whiteside - YBI Coordination Engineer per memorandum dated August 25, 2008 and concurred by Hong Wong - Project Engineer and Alec Melkonians - Project Manager.

Maintenance concurrence is not required as this change order only acts to procure long lead time materials. Concurrence shall be obtained under the change order that provides for the construction of the ETI structure.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Mike Whiteside, Toll Bridge Design	Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$1,600,000.00	\$1,600,000.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$1,600,000.00	\$1,600,000.00
Other (specify):		Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE		
District Prior Approval By:		Date	<input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input checked="" type="checkbox"/> NON-PARTICIPATING		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL SEGREGATION    (if more than one Funding Source or P.I.P. type)		
Resident Engineer's Signature:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
			FEDERAL FUNDING SOURCE    PERCENT		

**South-South Detour, Contract No. 04-0120R4**  
**Contract Change Order Implementation Strategy**  
**October 2008**

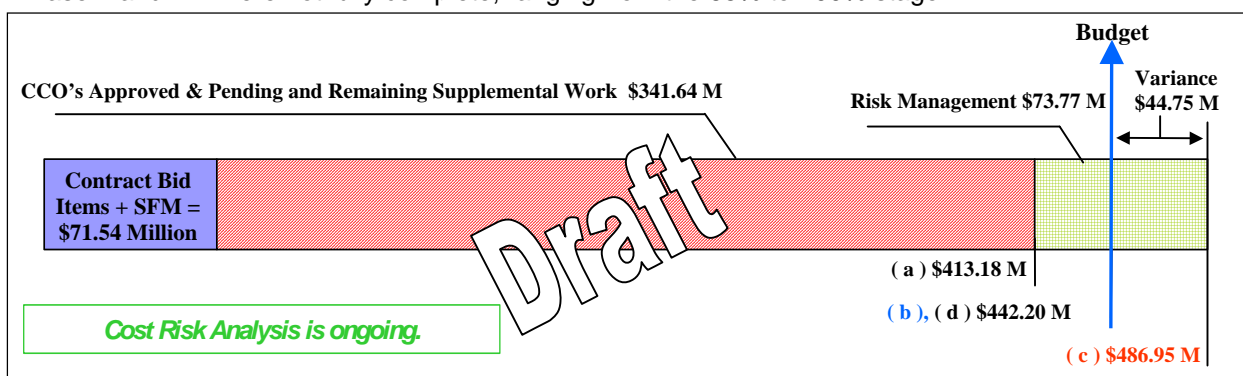
**DRAFT**

South-South Detour (Contract 04-0120R4)			
Contract Award:	March 10 <sup>th</sup> , 2004	Suspension Days:	302 Working Days
Original Working Days:	475 Working Days	Contract Extensions:	1195 Working Days
Original Contract Completion:	July 27th, 2005	Projected Contract Completion:	April 30, 2010

## Introduction

Two memos were developed to outline a strategy for a revised SSD project that enhanced SSD viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the SSD project.

As approved at the March 2008 TBPOC meeting the revised budget for the SSD Project is 442.2M. This figure was established using available information as of January 2008 noting that the plans and specifications for the WTI Phase 2 and ETI were not fully complete, ranging from the 65% to 100% stage.



## Scope of Work for SSD

The revisions to the original scope of work currently associated with the South-South Detour Project have been assigned into the following categories with their associated estimated cost:

Category	Scope of Work	Current Budget (March 2008)	In Progress Status Update from March 08 Approved Budget	
			Current	Delta
(0)	Original Bid Items, Baseline CCOs (1 through 48), and State Furnished Materials	\$83.7	\$83.7	\$0
(1)	SSD New Viaduct	\$31.9	\$34.4	\$2.5
(2a)	West Tie-In Existing Viaduct Phase 1	\$39.6	\$40.0	\$0.4
(2b)	West Tie-In Phase 2	\$15.0	\$16.0	\$1.0
(3)	East Tie-In	\$72.5	\$94.6	\$22.1
(4)	YBI Transition Structures Advance Foundations	\$105.8	\$103.0	(\$2.8)
(5)	Administrative Issues and General CCOs	\$48.6	\$51.2	\$2.6
<b>Subtotal</b>		<b>\$397.1</b>	<b>\$422.9</b>	<b>\$25.8</b>
<b>Contingency</b>		<b>\$45.1</b>	<b>\$19.3</b>	
<b>Approved Budget</b>		<b>\$442.2</b>		

Contract payments as of October 20, 2008: \$247.5M

As shown, the current status of CCOs required to modify the original scope of the SSD work as defined in Categories 1 through 5 is \$339.2 M. The status of each category of work is discussed in the succeeding pages of this report.



**South-South Detour, Contract No. 04-0120R4**  
**Contract Change Order Implementation Strategy**  
**October 2008**

**DRAFT**

**Bid Items, Baseline CCOs, & State Furnished Material**

**0**

The break down of Category (0) is as follows:

Original Contract Amount	\$ 71.2 million
Baseline CCOs (1 through 48)	\$ 12.1 million
State Furnished Materials	\$ 0.4 million
<b>Total</b>	<b>\$ 83.7 million</b>

**Baseline Contract Change Orders (1 through 48)**

CCO #	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	\$100,000.00
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	\$200,000.00
2	Bidder Compensation	5/8/2004	\$1,575,000.00
3	Partnering	9/7/2004	\$25,000.00
4	DRB	9/7/2004	\$100,000.00
5	Federal Trainee Program	11/12/2004	\$20,000.00
5S1	Non-Journey Person Training	3/10/2005	\$50,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	\$0.00
7	Sampling and Analysis Work	8/30/2004	\$30,000.00
8	SWPPP Maintenance Sharing	8/30/2004	\$75,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	\$50,000.00
10	Temporary Shuttle Van Service	7/16/2004	\$650,000.00
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	\$100,000.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	\$500,000.00
11	Utility Potholing	9/14/2004	\$100,000.00
12	Just-In-Time Training (RSC Pavement)	2/10/2005	\$5,000.00
13	PMIV Document Management System	11/3/2004	\$486,743.50
14	Temporary Suspension	5/19/2004	\$0.00
15	Archaeology Investigation	7/19/2004	\$30,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	\$15,000.00
16	Roadway Profile at WTI	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	\$108,217.45
18	Access Control Measures	9/8/2004	\$50,000.00
19	EDR1 Alignment Modification	5/12/2005	\$0.00
20	A490 Bolts	10/23/2006	\$0.00
21	Removal /Disposal of Stairway	4/13/2005	\$14,060.00
22	Clean Stairs and Walkways	5/24/2005	\$35,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A
24	East and West Tie-In Temporary Suspension	2/1/2005	\$2,181,467.40
24S1	Read Inclinometer/Adjust Equipment Costs	10/18/2005	\$29,782.99
<b>Total for Baseline Contract Change Orders</b>			<b>\$12,082,527.26</b>

CCO #	Description	Executed Date	Cost
24S2	Temporary Suspension Partially Extended	5/2/2006	\$4,812,631.58
24S3	Contract Days Extension/TRO Compensation	Voided	N/A
25	Bent 48, 49R, 52R Outside Boundary	3/24/2005	(\$19,000.00)
26	Bent 48 Articulation	4/22/2005	\$0.00
27	Bent 52L Footing Conflict	1/19/2006	\$94,386.51
28	Hydroseed Around W2 Columns	3/24/2005	\$20,000.00
29	Replacement of Surveillance Camera	3/24/2005	\$3,542.00
30	Additional Elastic Response Analysis	5/31/2005	\$10,700.00
31	Soil Analysis Outside Plan Limits	6/27/2005	\$20,000.00
32	SFPUC Permit Specification Change	5/17/2005	\$0.00
33	Design Enhancements	Voided	N/A
34	Pole Structure Welding Specification Revision	9/30/2005	\$0.00
35	Revision of East Tie-In Design Criteria	Voided	N/A
36*	Extend Limits of Viaduct Demolition	Voided	N/A
37	4 Hr Emergency Travel Way	Voided	N/A
37S1	Emergency Travel Way Falsework	Voided	N/A
38	Revision of West Tie-In Design Criteria	8/4/2005	\$0.00
39	Provide Shuttle Service to USCG	6/27/2005	\$10,000.00
40	Sewer Pipe Material Change	9/26/2005	\$1,561.95
41	Bent 49L Utility Relocation	Voided	N/A
42	Bent 48R Pile Load Test	9/12/2005	\$20,000.00
42S1	Bent 52R Pile Load Test	12/15/2005	\$5,000.00
43	Material On Hand Specification Change	9/16/2005	\$75,953.88
43S1	Addition of YBITS Advance to Material On Hand	Voided	N/A
44	Electrical Call Box Relocation		\$47,480
45	Additional SWPPP	2/21/2006	\$250,000.00
46	Southgate Road Reopening	3/8/2006	\$50,000.00
47	Hazardous/Non-Hazardous Soil Removal	12/15/2005	\$100,000.00
48	Buried Man-Made Objects	12/15/2005	\$50,000.00
			<b>\$12,082,527.26</b>

- The scope of work for CCO No. 36 was completed and compensated for under the larger scope of CCO No. 76.

**SSD New Viaduct**

**1**

Progress of Work

Construction of foundations, columns, and bent caps is complete. Fabrication of the structural steel truss, performed by Dongkuk S&C in South Korea, is complete with all steel having arrived in the U.S. Concrete has been poured for both upper and lower decks in span 48. Deck construction is ongoing in Span 49 and Span 50. Steel erection is ongoing in Span 51.

Status of Contract Change Orders: SSD New Viaduct:

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
49	LS	Stringer and Floor Beam Design Study	N/A	N/A	Executed 5/2/2006	\$109,182	N/A
49S1	FA	Truss Design Modifications (Changes to Stringer and Floor Beam Connections)	I&A 12/08/06	N/A	Executed 8/17/2006	\$150,000	N/A
49S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	N/A
Subtotal (CCO #49 and Supplements)						\$359,182	
50	FA	Stand Alone Viaduct Design	N/A	N/A	Executed 5/8/2006	\$325,000	N/A
50S1	FA		I&A 9/21/06	N/A	Executed 10/16/2006	\$300,000	N/A
50S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	N/A
50S3	FA		I&A 2/09/07	N/A	Executed 2/13/07	\$175,000	N/A
Subtotal (CCO #50 and Supplements)						\$900,000	
54	LS	Deck Drainage	N/A	N/A	Executed 5/2/07	\$8,000	N/A
55	LS	Viaduct Fabricator Change (SGT Closeout)	I&A 7/08/07	Approved 6/27/07	Executed 8/7/07	\$5,665,330	N/A
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials		Approved 3/5/08	Executed 3/17/08	\$980,600	\$70,600
59	LS	Water Blast Rebar Cages	N/A	N/A	Executed 2/22/07	\$5,000	N/A
60	LS	Construction of Bent Caps	I&A 6/13/07	Approved 6/27/07	Executed 6/18/07	\$7,435,950	N/A
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	I&A 5/14/07	N/A	Executed 9/27/07	\$800,000	N/A
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	I&A 7/19/07	N/A	Executed 8/7/07	\$803,400	N/A
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06		N/A	Executed 8/4/08	\$75,860	(\$174,140)
80	LS	Erection Costs for Viaduct Design Changes through October 2006		Approved 1/31/08	Executed 2/20/08	\$6,912,200	N/A
<b>82</b>	<b>FA</b>	<b>AC Paving and Erosion Control for Deck Drainage</b>		<b>N/A</b>	<b>In progress</b>	<b>\$250,000</b>	<b>\$0</b>
85	LS	Design of 300mm Waterline Relocation	N/A	N/A	Executed 3/17/08	\$12,480	\$1,994
87	LS	Viaduct Shipping Escalation Costs	I&A 7/24/07	N/A	Executed 10/2/07	\$534,570	N/A
87S1	LS	Viaduct Shipping Escalation Costs	I&A 1/14/08	N/A	Executed 1/30/08	\$200,000	N/A
88	LS	Viaduct Fabrication Delays	I&A 7/19/07	N/A	Executed 8/7/07	\$954,460	N/A
88S1	LS	Viaduct Fabrication Delays	I&A 8/22/07	N/A	Executed 9/27/07	\$776,630	N/A
98	FA/LS	Viaduct Steel Storage and Handling Cost		N/A	Executed 6/18/08	\$845,370	\$345,370

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99	LS	Viaduct Erection Costs (Post Oct. 2006)		N/A	Executed 5/22/08	\$862,614	(\$139,716)
100	FA	Viaduct Fabrication Costs (Post Oct. 2006)	I&A 1/22/08	N/A	Executed 1/28/08	\$650,000	N/A
105	FA/LS	Dongkuk Fabrication and Temp Bracing Fabrication Costs (July 2007 Plans)		Approved 4/3/08	Executed 4/17/08	\$2,140,640	\$690,640
106		CCO Voided...previous scope of work was incorporated into CCO 105				-	-
107	LS	CCM Erection Support & Escalation Costs		TBD	Executed 10/02/08	\$500,000	\$0
111	FA/LS	USCG Parking Replacement and Protection	N/A	N/A	Executed 3/17/08	\$163,223	\$163,223
111S1	LS	Additional costs USCG Parking Lot	N/A	N/A	Executed 6/30/08	\$8,940	\$8,940
115	FA	Third VIA Shipping for CCO #67 July 07 plans		N/A	Executed 5/22/08	\$850,000	\$450,000
<b>128</b>		<b>Waterline Relocation (NOPC 6)</b>		<b>N/A</b>	<b>In progress</b>	<b>\$200,000</b>	<b>\$200,000</b>
133		Lightweight Conc. Mix Design Spec Change		N/A	Executed 9/12/08	\$0	\$0
<b>135</b>		<b>Deck Escalation Costs</b>		<b>N/A</b>	<b>In progress</b>	<b>\$500,000</b>	<b>\$0</b>
136	FA/LS	Relocate USCG road for steel erection FW Towers at Span 51	N/A	N/A	Executed 9/23/08	\$74,540	(\$74,460)
138	LS	Waterline Relocation for Fire Hydrant (Conflicts with Span 49 Falsework)	N/A	N/A	Executed 9/23/08	\$278,200	\$278,200
148	FA	USCG Road Canopy below Viaduct		N/A	Executed 9/23/08	\$500,000	\$500,000
156		Span 49 F/W Conflict w/ USCG Utilities	N/A	N/A	Executed 9/23/08	\$180,820	\$180,820
<b>Current Forecast for SSD New Viaduct</b>						<b>\$34,428,009</b>	<b>\$2,501,471</b>

Budget Status

The Viaduct portion of the SSD was bid at \$26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$9M. The January 2008 revised additional cost estimate is \$31.9M with a current projection of \$34.4M. CCOs executed to date are \$33.5M.

**West Tie-In**

**Phase 1**

**2a**

Progress of Work

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain. WB On-ramp was reopened on August 8, 2008.

Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 approved Budget
58	FA	Bridge Removal Plan	N/A	N/A	Executed 11/21/06	\$60,000	N/A
58 S1	FA	Bridge Removal Plan	N/A	N/A	Executed 7/05/07	\$40,000	N/A
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	I&A 1/09/07	N/A	Executed 2/27/07	\$400,000	N/A
61S1	LS/FA	Construction of Stage 1 Area and Substructure	I&A 5/16/07	Approved 6/27/07	Executed 5/18/07	\$9,995,644	N/A

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66	FA	TMP - Video Equipment (WTI Phase 1)	N/A	N/A	Executed 7/20/07	\$175,000	N/A
68	FA	Temporary Electrical Work	N/A	N/A	Executed 7/20/07	\$140,000	N/A
68S1	FA	Temporary Electrical Work Stage 2, 3 &4	I&A 12/02/07	N/A	Executed 10/31/07	\$510,000	N/A
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$11,096,900	N/A
76	LS	Labor Day Bridge Demolition and Move-In	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$2,240,300	N/A
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	I&A 8/28/07	Approved 8/24/07	Executed 9/27/07	\$10,144,140	N/A
84	LS	Skid Track Foundations and Temporary Columns	I&A 7/27/07	Approved 7/27/07	Executed 7/31/07	\$3,980,000	N/A
101	LS	Reconstruct Slab, West Bound On-ramp		N/A	Executed 4/17/08	\$846,140	\$331,140
102	FA	Northside Drainage Work	N/A	N/A	Executed 4/4/08	\$60,000	<b>\$60,000</b>
117	FA	<b>Surface Drainage (Southside)</b>		<b>N/A</b>	<b>In Progress</b>	<b>\$100,000</b>	
103	LS	Labor Day Weekend Closure Misc. Costs		N/A	Executed 2/20/08	\$173,140	(\$26,860)
<b>Current Status for West Tie-In (Phase 1)</b>						<b>\$39,961,264</b>	<b>\$364,280</b>

Budget Status

The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$40M. The January 2008 revised additional cost estimate is \$39.6M with a current projection of \$40M. CCOs executed to date are \$39.9M.

**West Tie-In**

**Phase 2**

**2b**

Progress of Work

Construction/Design coordination meetings with the Contractor are ongoing as needed. Foundation work and columns are complete. Frame 1 falsework is in progress.

Status of Contract Change Orders: West Tie-In (Phase 2)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
62	LS	Construction of Phase 2 Foundations and Credits for Elimination of Bid Items 12 and 90		Approved 4/4/08	Executed 4/7/08	(\$4,649,850)	\$309,150
71	LS	WTI Phase 2 Pile at Bent 46L/Slab Bridge Removal	I&A 7/24/07	N/A	Executed 7/20/07	\$384,130	N/A
108	LS	Substructure		Approved 6/18/08	Executed 6/25/08	\$5,378,800	\$720,800
141		<b>Superstructure Construction</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$9,345,000</b>	<b>\$0</b>
143		<b>Civil Work (EB Onramp and Mainline)</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$5,587,000</b>	<b>\$0</b>
<b>Current Status for West Tie-In (Phase 2)</b>						<b>\$16,045,080</b>	<b>\$1,029,950</b>

Budget Status

The Contractor's bid price for the West Tie-In was \$9.0M. Based on the Department's December 14, 2006 Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional \$13.0M. The January 2008 revised additional cost estimate is \$15.0M, with a current projection of \$16M. This revision is based on complete foundation plans and 65% in progress substructure and superstructure plans.

East Tie-In

3

Progress of Work

Complete bent 52A and skid bent foundations design packages were delivered October 2007. Complete ETI design plans for the skid bents and skid beams were delivered March 15<sup>th</sup>, 2008 and complete truss plans were delivered April 7th. Construction/Design Coordination meetings with the Contractor are ongoing.

Fabrication subcontractors are continuing to procure material and fabricate members. Fabrication of the skid bent and skid beams is taking place at Thompson Metal Fab, Inc. in Vancouver, WA and the fabrication of the truss is taking place at Stinger Welding Inc. in Coolidge, AZ.

The existing SFPUC sanitary sewer pump station has been relocated, the new pump station is up and running. Construction of the skid bent foundations is progressing on schedule. Lead abatement in span YB-4 of the existing truss is complete. Work on footing and columns at bent 52A is complete.

Status of Contract Change Orders: East Tie-In

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
63	FA	Advance Engineering (Work Plans and Submittals)	I&A 8/22/07	N/A	Executed 9/27/07	\$800,000	N/A
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	N/A	N/A	Executed 10/10/07	\$111,280	N/A
69S1	LS	Construction for Pump and Control Panel for Relocated Pump Station		N/A	Executed 3/17/08	\$499,996	\$11,986
90	LS	Bent 52A and Skid Bent Footings and Credits for Eliminated Bid Items 10 and 42		Approved 4/4/08	Executed 4/14/08	\$11,308,380	\$0
92	FA	ETI AT&T Fiber Optic Relocation	N/A	N/A	Executed 12/17/07	\$175,000	N/A
93	FA	Lead Paint Mitigation Existing Truss		N/A	Executed 2/20/08	\$563,725	\$3,725
97	FA	Bent 52A and Skid Bent Ftg's Material Procurement	I&A 11/06/07	N/A	Executed 11/19/07	\$850,000	N/A
104	LS	Pier E-1 Access Towers	N/A	N/A	Executed 1/30/08	\$150,000	N/A
113	LS	Relocate Waterline in Conflict with Northern Skid Bent Footings	N/A	N/A	Executed 3/17/08	\$167,990	\$167,990
121	LS	Soil Nail Wall Material Procure	N/A	N/A	Executed 3/17/08	\$142,670	N/A
127		RTU - 8 Service Platform	N/A	N/A	Executed 9/03/08	\$75,000	(\$75,000)
		<b>Roll-In Roll-Out, Fabricate and Install Joint Seals, Demolition, Existing Truss Strengthening, Stage 2 Wall, TMP, and Civil Work</b>			<b>In Progress</b>	<b>\$19,871,769</b>	<b>\$0</b>
137	LS	Pump station Water Tank Demo	N/A	N/A	Executed 6/26/08	\$114,490	\$114,490
112	FA	Material Procure Skidbent (1532 Tower Legs)		Approved 2/4/08	Executed 2/19/08	\$2,000,000	\$15,363,705
112S1	FA	Material Procure ETI Superstructure		Approved 3/5/08	Executed 3/17/08	\$8,500,000	
112S2	FA	Material Procure ETI Temporary Bypass Structure		Approved 6/16/08	Executed 6/25/08	\$3,500,000	
<b>112S3</b>	<b>FA</b>	<b>Material Procure - Additional Funds</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$3,000,000</b>	
116	FA/LS	Fabricate Superstructure & Skidbent		Approved 6/16/08	Executed 8/8/08	\$14,166,180	
140	LS	Truss Steel Fabrication		Approved 9/04/08	Executed 9/23/08	\$10,920,525	\$5,493,651
<b>129</b>		<b>Skid Bent and Truss Steel Erection</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$14,712,500</b>	



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144	FA	Expansion Joint Mock-up		N/A	Executed 9/23/08	\$850,000	(\$150,000)
<b>149</b>		<b>Bearing Fabrication</b>			<b>In Progress</b>	<b>\$1,600,000</b>	<b>\$1,151,118</b>
154		East Pile Deduct at BW6, East Pile	N/A	N/A	Executed 9/04/08	(\$400)	(\$400)
155		Excess Soil Offhaul		N/A	Executed 9/03/08	\$500,000	\$0
<b>Current Status for East Tie-In</b>						<b>\$94,579,105</b>	<b>\$22,081,265</b>

Budget Status

The Contractor's bid price to construct the Contractor's design for the East Tie-In was \$6.0M with an additional \$1.46M to demolish the remaining portion of the ETI YB-4 span. The Department's December 14, 2006 Strategy Memorandum estimated an additional cost of \$34.0M to construct the Department's ETI roll out/roll in design concept. At the time, this estimate was based on minimal design information available. The January 2008 revised additional cost estimate is \$72.5M, with the current projection at \$94.6M. This revision is based on complete Bent 52A and skid bent foundation design plans and 65% skid bent, skid beam, and truss design plans. Executed CCOs to date are \$55.4M.

The material procurement and fabrication cost increases (CCOs 112, 116, & 140) are attributed to an increase in steel weight from the 65% to 100% designed plans along with a market fluctuation in steel price as well as additional costs to expedite the Steel Truss fabrication work.

**Yerba Buena Island Transition Structures  
Advance Foundations**

4

Progress of Work

The YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7 Ramp and the temporary E.B. onramp abutment.

- W3 3L – substantially completed  
3R – footing has been poured
- W4 4L – substantially completed  
4R – column (2nd lift of 3) in progress
- W5 5L – 75 of 140 piles driven  
5R – work not started
- W6 6L – substantially completed  
6R North - column (2nd lift of 3) in progress  
6R South - work not started.
- W7 Mainline – construction of the temporary soil nail wall in progress  
Ramp – work not started.
- EB on-ramp abutment – work not started.

Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	N/A	N/A	Executed 1/8/07	\$150,000	N/A
64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic Controls	I&A 3/13/07	Approved 2/15/07	Executed 4/4/07	\$5,835,000	N/A
65	FA	Demo Exist Bridge Adv. Planning	N/A	Approved 4/14/08	Executed 4/18/08	\$175,000	\$0

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<b>65S1</b>		<b>Demolish Exist Bridge (Bent 48 to YB-4)</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$7,625,000</b>	<b>\$0</b>
70	FA	Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	I&A 4/04/07	N/A	Executed 5/1/07	\$500,000	N/A
70S1	FA	YBITS Advance – ISD 3R, 4R/L, 5R/L, 6R/L, 7R/L & ramp		N/A	Executed 1/30/08	\$450,000	N/A
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	I&A 10/24/07	Approved 10/30/07	Executed 11/19/07	\$62,958,990	N/A
<b>73S1</b>		<b>Duct Bank Revisions</b>		<b>N/A</b>	<b>In Progress</b>	<b>\$200,000</b>	<b>\$200,000</b>
75	LS	YBITS W7R/L Foundations and Columns		Approved 4/3/08	Executed 4/14/08	\$13,150,000	<b>(\$3,657,884)</b>
<b>75S1</b>		<b>Bent W7 Structure Backfill</b>			<b>In Progress</b>	<b>\$1,750,000</b>	
77	LS	YBITS W4L Foundations and Columns	I&A 6/13/07	Approved 7/27/07	Executed 7/20/07	\$7,125,000	N/A
78	FA	Relocation of Sewer Force Main	N/A	N/A	Executed 7/17/07	\$125,057	N/A
<b>94</b>	<b>LS</b>	<b>YBITS Temp. EB Onramp Abutment and Staging</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$2,219,850</b>	<b>\$0</b>
118	FA	Vibration & Elev. Monitoring at W5L		N/A	Executed 2/20/08	\$50,000	\$50,000
118S1	FA/LS/ID	Nimitz House vibration monitoring		N/A	Executed 8/05/08	\$50,050	\$50,050
120	LS/Credit	CIDH Pile Mitigation Deduct		N/A	Executed 3/17/08	(\$400)	(\$400)
<b>124</b>		<b>Seismic Monitoring &amp; Column Grounding</b>		<b>N/A</b>	<b>In Progress</b>	<b>\$100,000</b>	<b>\$100,000</b>
126	FA	YBITS Excavation / Hazmat Disposal		Approved 4/3/08	Executed 4/17/08	\$500,000	\$400,000
147	LS	Add Cost W4R Foundation Construction		N/A	Executed 7/21/08	\$25,024	\$25,024
<b>Current Status for YBI Transition Structures Advance Foundations</b>						<b>\$102,988,571</b>	<b>(\$2,833,210)</b>

Budget Status

The Department's December 25, 2006 Strategy Memorandum estimated the cost to construct Bents W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, and W7 Ramp to be \$107M. In addition, the temporary E.B. onramp abutment was added at a later date with no estimate revision. The Department's December 14, 2006 Strategy Memorandum estimated the additional demolition costs for the existing bridge (Bent 48 through YB-4) to be \$3.5M. Removal of the existing bridge is included in the current contract; however, the Department anticipates additional costs resulting from impacts of the YBITS Advance work and associated costs due to escalation. The combined estimate for both was \$110.5M. The January 2008 revised additional cost estimate is \$105.8M with a current projection of \$103M. Total CCOs executed to date are \$91.1M.

**Administrative Issues General CCOs**

**5**

Progress of Work

Administrative issues that remain on the SSD contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, the increased scope of work, and other necessary changes to the contract. Additionally, costs for implementing COZEEP for the East and West Tie-Ins need to be accounted for.

The following list of target milestones was previously provided to the Contractor to incorporate into the project schedule. This information will be revised as more detailed schedule information is developed.

	<b>Date</b>	<b>Status</b>	<b>Notes</b>
W3L (foundation and column up to splice zone)	March 15th, 2007	Complete	finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4th, 2007	Complete	finished 9/04/07
Access to W3R Available to CCM	January 2nd, 2008	Partial access provided	coordinating access with SAS
Upper East Tie-In Area Available to CCM (Revised October 2008)	December 2009	Partial access provided	coordinating access with SAS

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East Tie-In Roll-Out/Roll-In Complete (Revised October 2008)	September 7th, 2009		
Project Completion (Revised October 2008)	April 30th, 2010		

The Department has extended TRO compensation at the original contract rate through September 1, 2009. The Contractor has completed a TRO audit. The Department is reviewing this information so that an appropriate TRO adjustment can be negotiated.

The Department continues to pursue a resolution to the remaining NOPC issues. Of the 18 NOPC issues, only three remain outstanding. Of the three it is anticipated that Viaduct CCO #128 will resolve NOPC #6, resolution of the existing structure demolition costs will resolve NOPC #15, and resolution of the TRO costs will resolve NOPC #18.

Status of Contract Change Orders: Administrative Issues

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
1 S2	FA	Flagging & Traffic Control	N/A	N/A	Executed 12/5/07	\$200,000	N/A
1S3	FA	Flagging & Traffic Control	N/A	N/A	Executed 7/2/08	\$300,000	\$300,000
13S1	FA	PMIV Additional Funds (Resolved NOPC 7)			Executed 3/17/08	\$300,000	\$300,000
45 S1	LS	Additional SWPPP	I&A 12/14/07	N/A	Executed 1/31/08	\$350,000	N/A
51	LS	NOPC 12 & 13 Resolution	N/A	N/A	Executed 8/17/06	\$25,234	N/A
52	0	Elimination of Contractor's Design of Tie-Ins	I&A 1/19/07	N/A	Executed 3/2/07	\$0	N/A
53	FA	Handling and Storage of Material	I&A 11/06/06	N/A	Executed 12/8/06	\$240,000	N/A
56	LS	Contractor's Design additional cost... Resolved NOPCs 2,3,4,8,9,10,11,14, and 16		Approved 3/5/08	Executed 3/17/08	\$6,837,310	(\$162,690)
57	LS	Demolition of Building 206	N/A	N/A	Executed 10/18/06	\$22,378	N/A
57S1	LS	Remove and Clear Building 254	N/A	N/A	Executed 6/4/07	\$10,572	N/A
66S1	FA	Video/Photo Documentation Services Supplemental Funds	N/A	N/A	Executed 4/14/08	\$200,000	\$200,000
86	LS	Additional Suspension Costs	N/A	N/A	Executed 5/19/08	\$42,764	(\$57,236)
91	LS	Contract Days Extension/TRO Compensation to November 08	RPP 8/28/07	TBD	Executed 10/31/07	\$1,818,948	N/A
91 S1	LS	Base Contract TRO Extension to September 1, 2009	I&A 10/25/07	Approved 10/30/07	Executed 11/16/07	\$8,463,159	\$0
<b>91 S2</b>	<b>LS</b>	<b>Global TRO adjustment and Base Contract TRO extension to December 31, 2009</b>		<b>TBD</b>	<b>In Progress</b>	<b>\$28,600,000</b>	<b>\$0</b>
96	FA	SWPPP Steep Slope Stabilization Measures	N/A	N/A	Executed 1/4/08	\$190,000	\$0
96S1	FA	Add Funds Shotcrete Slope at Bent 48	N/A	N/A	Executed 7/2/08	\$40,000	\$40,000
109	FA	MEP Coordination	N/A	N/A	Executed 1/30/08	\$100,000	\$0
110	FA	Geotech. Exploration Pads and Support	N/A	N/A	Executed 2/20/08	\$150,000	\$50,000
119	FA/LS/ID/UP	Project Wide SWPPP	I&A 4/07/08	N/A	Executed 4/17/08	\$638,939	\$638,939
123	FA	Treasure Island Yard Lot Rental	I&A 4/16/08	N/A	Executed 4/17/08	\$600,000	\$600,000
125	FA	Project Access Paving		N/A	Executed 4/04/08	\$150,000	\$150,000
125S1	FA	Additional Funds, Project Access Paving	I&A 6/12/08	N/A	Executed 4/25/08	\$35,000	\$35,000

**South-South Detour, Contract No. 04-0120R4**  
**Contract Change Order Implementation Strategy**  
**October 2008**

**DRAFT**

130	LS	Project Retention	I&A 4/07/08	N/A	Executed 4/14/08	\$136,510	\$136,510
131		<b>Permanent Erosion Control</b>		<b>N/A</b>	<b>In Progress</b>	<b>\$ 200,000</b>	<b>\$200,000</b>
132	LS	Storm Damage Slope Repair (Resolved NOPC 17)		N/A	Executed 5/23/08	\$23,870	\$23,870
142	FA	Macalla Road Sinkhole Repair		N/A	Executed 7/18/08	\$150,000	\$150,000
146	FA	Macalla Road Tree Trimming	N/A	N/A	Executed 7/21/08	\$50,000	\$50,000
151		Public Safety Spec Change (Suspended Load)			Executed 9/23/08	\$0	\$0
		<b>Non CCO Charges...COZEPP, lead survey, respirator training</b>			<b>In Progress</b>	<b>\$1,323,000</b>	<b>\$0</b>
<b>Current Status for Administrative and General CCOs</b>						<b>\$51,197,684</b>	<b>\$2,654,393</b>

**Budget Status**

As of January 2008 the revised additional cost estimate for Time Related Overhead, escalation issues, and job wide changes is \$48.6M with the largest estimated cost being attributed to a global TRO adjustment. As Contract Change Orders for these items are negotiated, this estimate will be updated. Costs related to settlement of NOPC issues not captured here will be paid out of the contract contingency.

Additionally, the original contract allotment provided \$1.3M for COZEPP. Subsequently, there were \$23,000 in other charges for a lead survey and respirator training both related to the WTI Phase 1 demolition work, providing for total non-CCO related charges of \$1.323M to the contract. These costs are shown here to capture costs to the project. It is also important to note that with two full bridge closures planned additional COZEPP funds may be required.

Total CCOs executed to date are \$21.1M.

**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

- c. Yerba Buena Island Transition Structures  
(YBITS) No. 1**
  - 1) Update (matrix)**



## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7c1  
Item- San Francisco-Oakland Bay Bridge Updates  
Yerba Buena Island Transition Structures (YBITS) No. 1

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**Recommendation:**

For Information Only

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

The matrix on the following page is provided as a tracking tool for the specification elements contained in the Yerba Buena Island Transition Structures No. 1 contract.

Subject	Method for Incorporation into Project		Notes			
	Bid Documents	Addendum / CCO / Other	Jul 2008	Sep 2008	Oct 2008	Nov 08
Roadway and Structure Plans	✓		Roadway and structures plans are complete and are ready to go excluding items listed below	Roadway and structures plans are complete and advertised.		
A + B Bidding	✓		Will be incorporated into the contract. The B time will include completing work up to 12 meters before hinge K with a maximum of 900 days at \$50,000 per day.			
Bid opening date		✓		Bid opening date may require an extension. See detailed discussion in TBPOC agenda item, Opportunity Schedule Update.	Addendum may be presented to the TBPOC for approval in November for proposing an extension to the bid opening date in accordance with recommendations from the Corridor Schedule Team. Additional information will be developed in October to assess status of Corridor Schedule.	Addendum #1 issued, extending bid opening to July 14, 2009.
Areas for Contractors use (Areas PR and FP)	✓	✓	To minimize contractor congestion on the island, YBITS #1 may not start fieldwork until 1/1/2010. Potential risk that C.C. Myers may not clear area until 4/1/2010. Removed work restriction on the area around hinge K to allow for maximum amount of work to occur. Potential risk that ABF will need area to construct SAS.	To minimize contractor congestion on the island, the start of field work for YBITS #1 must be coordinated with completion of work by C.C. Myers. Current update to the Opportunity Schedule indicates that C.C. Myers may not clear the area until April 2010. Removed work restriction on the area around hinge K to allow for maximum amount of work to occur. Potential risk that ABF will need area to construct SAS.		Revised bid date would result in start of work on YBI in March/April 2010, which should be past completion of work by C.C. Myers.
Demolition of existing bridge		✓	This work is currently in the C.C. Myers contract; however, it may be possible to place this work in YBITS 1 should that make the most sense from a scheduling and cost perspective.			
W5 foundation and column		✓	There is a provision to remove this work from the CCO with C.C. Myers. This work can be placed back in YBITS 1 should that make the most sense from a scheduling and cost perspective.			
Falsework ownership		✓	If the structures built during YBITS 1 cannot be stressed, they may need to remain on falsework for an extended period of time, which would make Department ownership of the falsework desirable.			Focus group meetings are ongoing.
Alternative construction method		✓	Add a hinge to the YBITS 1 contract <u>Pros:</u> 1. Avoids conflict in Area FP with ABF. 2. Allows for independent stressing of frames and decoupling this work from SAS contract. 3. May avoid need for more substantial falsework <u>Cons:</u> 1. Currently not designed in contract. 2. Complicated change that could significantly delay the project			Focus group meetings are ongoing.

**Attachment(s):** N/A

**ITEM 7: SAN FRANCISCO-OAKLAND BAY  
BRIDGE UPDATES**

- d. Oakland Touchdown (OTD) No. 1**
  - 1) Update**

## *Memorandum*

**TO:** Toll Bridge Program Oversight Committee (TBPOC)      **DATE:** October 29, 2008

**FR:** Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 7d1

Item- San Francisco-Oakland Bay Bridge Updates

Oakland Touchdown (OTD) No. 1 Update

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**Recommendation:**

For Information Only

**Cost:**

N/A

**Schedule Impacts:**

N/A

**Discussion:**

A verbal update on the status of the Oakland Touchdown No. 1 contract will be provided at the meeting.

**Attachment(s):**

N/A

## **ITEM 8: OTHER BUSINESS**

No Attachments